

# THE MONIST

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## THE CHRIST OF PRIMITIVE CHRISTIAN FAITH. IN THE LIGHT OF RELIGIO- HISTORICAL CRITICISM.<sup>1</sup>

### INTRODUCTORY REMARKS.

#### THE JESUS OF HISTORY AND THE CHRIST OF FAITH.

**I**T is a great and lasting glory of nineteenth century scientific theology that it has taught the distinction between the Christ of faith and the Jesus of history, which are identified by ecclesiastical dogmatics. By careful and painstaking critical investigations it has shown how the dogma of the god-man came into existence, gradually, as the result of a process of combination in which religious ideas of various origin were blended with the recollections of the primitive Christian congregation respecting the life of their master. It has attempted further, by eliminating later elements and by going back to the oldest sources, to get as near as possible to the historical reality regarding the founder of our religion, and to make the understanding and the heart of the modern world more familiar with his figure, stripped of its veil of myths, in its purely human greatness as the worshipful portrait of a lofty religious and moral hero.

The value of this undertaking is incontestable, even though sober common sense cannot shut its eyes to the fact that there are also involved many illusions with reference to the significance of the results thus obtained.

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<sup>1</sup>Translated from the original manuscript by Prof. W. H. Carruth, University of Kansas.

In glancing at the abundance of literature connected with the life of Jesus the question cannot be avoided, whether these attempts to get at the bottom of the historical reality can ever yield more than hypothetical conjectures, whether they do not, precisely in proportion as they paint the life of the founder more concretely, lose from under their feet the firm ground of what is historically authenticated and soar into the regions of ideal fiction. One can scarcely avoid giving an affirmative answer to these questions when he observes the profound differences in the professedly historical conclusions of the authors of the various lives of Jesus.

Indeed, could anything else be expected when we consider the fact that even the earliest accounts reveal the most unmistakable evidence of the transfusion of the historical elements with the ideal motives of legend, with apologetic argumentation and dogmatic speculation? Jewish prophetic expectations, rabbinical lore, oriental gnosis and Greek philosophy had already mixed their colors upon the palette from which the portrait of Christ was painted in the writings of the New Testament.

All that we can derive as authentic from these writings is the Christ of the faith of the primitive Christian congregations and teachers. To this portrait, which was so varied and complicated from the beginning, the recollections of the first disciples concerning the life and death of their master contributed an important portion, indeed, the center of crystallization of the whole, but yet only one portion alongside many others. But the question, How much of the portrait of Christ in the New Testament is to be credited to genuinely historical recollection and how much to other sources? is a problem which can never be solved with absolute certainty.

CHRISTIANITY BASED ON THE CHRIST OF FAITH, NOT ON THE JESUS  
OF HISTORY.

The fact that so many people continue to shut their eyes to the incontestable reality of this situation is doubtless connected with the assumption, which seems to pass almost universally as an axiom in our day, that the knowledge of the nature of Christianity stands or falls with the exact knowledge of the historical person of its founder.

But is not this assumption also an illusion? For surely it is evident that the Christian religion and the Christian church are founded upon the faith in Christ of primitive Christianity, as it is recorded in the New Testament, and in contemporary Christian literature. This and nothing more is the solid historical fact, which cannot be altered, however the answer may run to the inquiry regarding the origin of this faith in Christ. Whether historical recollection concerning Jesus of Nazareth contributed more or less and directly or indirectly to its development, or, indeed, in case, as is highly improbable, it contributed nothing at all, yet for all that, the content of this faith and accordingly the nature of Christianity would remain altogether the same.

Now it follows from these reflections that scientific theology cannot fulfill its mission of investigating the nature of Christianity, if, instead of searching thoroughly and without reserve into the entire content of this New Testament belief in Christ, it selects out only what seems agreeable to present-day thought, in order, by ignoring everything else and by injecting much of its own invention, to construct an ideal of Christ in accordance with modern taste. This method of procedure is widespread to-day and much commended—who is not familiar with the series of novels called lives of Jesus, which was begun by Renan? And who does not praise Harnack's *Wesen des Christentums*?

In fact, a certain practical merit must be conceded to these works, inasmuch as they can reawaken among the many indifferent an interest in religious ideas and an enthusiasm for ethical ideals. Only we should guard against the tremendous error of thinking that the portraits of Christ drawn in these works, differing with the personality of the author, yet in all cases touched up in more or less modern fashion, are the result of scientific historical research, or that they compare with the primitive portrait of Christ, as does truth with error. We should be sufficiently sober and honest to admit that both the modern and the primitive portraits are the creations of the common religious spirit of their times, sprung from the natural necessity of faith to fix and visualize its characteristic principle in a typical form. The difference between the two corresponds

to the difference in the periods—in the earlier case a naive, mythical epic, in the later a sentimental, subjective romanticism.<sup>1</sup> Which of the two is truer is an utterly idle question, as idle, as, for instance, would be the question whether Homer's *Odyssey* or Milton's *Paradise Lost* and Klopstock's *Messias* were truer.

To the antique consciousness the portrait of Christ in modern garb would be unintelligible, and therefore untrue, while for the modern consciousness the naive faith in the antique mythical epic is no longer possible. But to consider the myth an empty illusion and superstition because we, being no longer so naive as the antique mode of thought, cannot regard it as historical reality, would be a gross blunder, pardonable in the eighteenth century, but which the historically disciplined thought of modern science ought to be finally above. Myths especially, and the religious ceremonies connected with them, in which the mythical material is dramatically presented, detached from transient forms and elevated into a perpetual phenomenon, are everywhere the most primitive and most vigorous expression of the characteristic genius of every religion, and have therefore the very greatest value for the historical student of religion. They are absolutely his fundamental source of knowledge.

But to be sure, in order to understand the sense and significance of the primitive Christian myths, one must not examine them in their traditional isolation, but must derive instruction from their kinship or connection with the myths and legends of the general history of religion. In my opinion there still lies a rich field of labor for the theology of the twentieth century in the realm of the comparative history of religion, in the cultivation of which we shall find the solution of many problems which Biblical exegesis and literary criticism have thus far attempted without great success. The realism of the ancient fashion of religious thought and speech, which we moderns think so strange that we are always inclined to dissipate it into symbolism, will become more intelligible and our sense for the psychological motives and the historical backgrounds of the legends will grow keener.

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<sup>1</sup>Cp. Schiller's distinction between naive and sentimental poetry.



We are, indeed, but at the threshold of this extensive task to-day. And if I venture, despite this fact, to offer a trial specimen of it in the religio-historical illumination of the primitive notion of Christ, I do so, hoping for kind indulgence, and at the same time with the purpose of paying my tribute of gratitude to the learned investigators of Holland, who have rendered the most distinguished service to the science of comparative religion—as one, instead of many, I name our never-to-be-forgotten friend, Tiele.

#### I.—CHRIST AS THE SON OF GOD.

##### THREE VIEWS.

That Christ was the son of God was the belief of the Christian Church from the beginning, but, as to how far and in what sense he was the son of God, there was at first much difference of opinion. We can distinguish at least three meanings of the word, each of which has its parallels partly in Jewish and partly in extra-Jewish religions.

1. According to the earliest views, the man Jesus was elevated to the rank of son of God by an act of divine adoption, which was associated in the first place with the resurrection from the dead and the ascent into heaven, and afterward by the voice from heaven at the baptism and the accompanying conference of the miraculous Messianic power of the spirit. According to this view "son of God" did not yet imply a supernatural character in Jesus, but only the endowment with the function and power of the Messiah, the divinely appointed king of the chosen people.

2. Alongside this view, which prevailed in the earliest church, there was found in the congregations of gentile Christians at a very early period the conception taught by the Apostle Paul, namely, that Jesus was the son of God in the sense that a personal spiritual being, who had previously existed in heaven, had become incorporate in him. Paul had conceived of this Christ-spirit not precisely as a god, but as God's own and first begotten son, and image, and as the prototype of man, as the celestial ideal man (the second man from heaven, 1 Corinthians, xv, 47), who was appointed from the beginning to save mankind from the curse of sin, of the law, and of death, by his appearance in an earthly body.

Now the mediator of salvation must also needs be from the beginning the mediator of creation, wherefore he is called in the Epistle to the Hebrews the "impress of the substance of God, upholding all things by the word of his power (i, 3), and in 1 Colossians "the first-born of all creation, in whom and through whom and for whom all things are created, and in whom all things consist" (i, 15 f.).

Now the Gospel of John condensed this chain of thought into the doctrine that in Jesus the "logos" had become flesh, having been in the beginning with God and himself a god, through whom all things had come to pass, in whom was the life and the light of men (i. 1 f.). According to this conception Christ is the son of God no longer by virtue of adoption and apotheosis, but by virtue of the incarnation of the divine being accomplished in his person, who, as the "logos," that is, the personal word, has been the mediator of all divine revelation from the beginning of the world.

3. A combination of these two conceptions, the incarnation of a god and the apotheosis of a man, is finally met in the tradition<sup>1</sup> which arose among the gentile Christians in the second century and soon became the most popular theory of all, namely, that Christ was the son of God in the sense that he was supernaturally begotten by the Holy Ghost, without a human father, and was born of the Virgin Mary, being therefore on the maternal side, indeed, a human being, but on the paternal side a son of God in the most specific physical sense of the word.

#### PARALLELS TO CHRISTIAN NOTIONS IN JEWISH RELIGION.

For these various views of the divine sonship of Christ Jesus<sup>2</sup> we find precise parallels partly in the religious history of Judaism and partly, and more completely, in that of gentile nations.

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<sup>1</sup>Matt. 1, 18, 25, and Luke 1, 34f. Only in these two passages, the latter of which did not belong, perhaps, to the original text, is this tradition mentioned in the Old Testament; it is therefore one of the latest elements of the New Testament Christ.

<sup>2</sup>For fuller proofs and exposition of the sketches of the New Testament Christ presented here, and in the lectures that are to follow, I refer once for all to my book, *Das Urchristentum, seine Schriften und Lehren*, 2d edition, 1902.

The adoptive-theocratic divine sonship of the Messiah goes back, as is known, to the early Israelitic notion of the intimate union of the Davidic kingdom with the tribal God Jahveh. The prophetic author of the Books of Samuel has God say of David: "I will establish the throne unto his seed forever. I will be his father and he shall be my son, so that if he commit iniquity I will chasten him with the rod of men and with the stripes of the children of men; but my mercy shall not depart from him as I took it from thy predecessor, but thy house shall be made sure forever before me" (2 Samuel, vii, 13, ff.).

Having faith in this alliance of Jahveh and the Davidic royal house, the pious king comforts himself (Psalm ii), in the face of the hostile counsels of the rulers against Jahveh and his anointed, with the certainty that God has established his king upon Zion, and has said to him: "Thou art my son, this day have I begotten thee (that is, appointed king). Ask of me and I will give thee the nations for an inheritance and the ends of the earth for thy possession; with an iron scepter thou mayest destroy them and dash them to pieces like potters' vessels" (Psalm ii, 6 ff.).

In this sense the Jewish people hoped for the anointed one (Messiah) of the day of salvation, who, as the son of David, was also to be the "son" of God, that is, his chosen favorite, protégé and vassal.

But beside this adoptive conception, which still prevails in the Psalms of Solomon, coming from the time of Pompey, there is found in the apocalyptic literature of late Judaism another, according to which the Messiah appears not as an earthly man and son of David, but as a mysterious spiritual being issuing from celestial concealment. In the metaphors of the Book of Enoch, written in the last decades before the Christian Era, the Messiah is described as the "Chosen One," the "Son of Man," who was concealed from God before the world was created, whose glory will endure from eternity to eternity and his power from generation to generation, in whom dwells the spirit of wisdom and might, who will judge the things that be in secret, work vengeance upon kings and rulers, but save the just and holy (Enoch, chapters xlv-li).

Furthermore, in the Apocalypse of Ezra (chapter xiii) the seer beholds something in the likeness of a man rising from the sea, flying on the clouds of heaven, destroying hostile armies with a stream of fire from his mouth, but saving and leading home from captivity the scattered Israelites. And this vision is then interpreted as follows: "The man rising from the depths of the sea is the one whom the Most High has been reserving for long years and through whom he purposes to redeem creation. As no one can learn what is in the depths of the sea, so no one of the dwellers upon earth can see my son and his attendants, save at the hour of his day" (i. e., of his revelation for the last judgment and the salvation of the world).

From this we perceive that the depths of the sea, from which the savior and son of God shall come forth, is only a symbol for his primeval concealment in a mysterious place. And while it is not indeed expressly said that this place is heaven, yet as much might be inferred from the savior's "lying on the clouds of heaven" (xiii, 3) and by the "attendants" who accompany his advent (verse 52), by whom we must understand either the angels or the righteous men of the first dispensation who were transported into heaven, and who, according to xiv, 9, tarry with the son of God until the fulfillment of the times.

Clearly, therefore, both according to the Apocalypse of Ezra and to the metaphors of Enoch, the coming savior is that son of God, the man (son of man), who was to preëxist in heaven unto the time of his revelation. True, it is hard to say how this is to be reconciled with the utterances of xii, 32, that the Christ would come from the seed of David, and that after a rule of four hundred years he, with all other men, would perish. A solution of this conflict will scarcely be found, but its existence may be explained by the fact that the author of this apocalypse remained undecided between the later thought of the Messiah as a preëxistent celestial being and the earlier notion of him as an earthly man and son of David.

#### PARALLELS IN NON-JEWISH THOUGHT—THE LOGOS DOCTRINE.

The combination of these two views, which existed in late Jewish times side by side, through the assumption of an incarnation

of the celestial son of God and of man in the body of an earthly man and son of David, was not accomplished within the Jewish fold, but was in its nature so plausible that we have no cause for surprise when we see it brought about very early under the Christian dispensation, from the time of Paul on.

The same importance that is held by the son of God and of man in the late Jewish apocalyptic writers is attributed in the Alexandrine-Jewish religious philosophy to that mediatorial being who is called now "wisdom," and now "logos" (reason and word). In the book of the Wisdom of Solomon, by a Hellenistic Jew of Alexandria, from the first century before Christ, "wisdom" is represented (vii, 22 ff.) as an independent spiritual being beside God, the (feminine) mediator of his revelation in creation, maintenance and government of the world, a semi-personal hypostasis, a semi-material fluid, ethereal and divisible, pervading all space, like the Stoic-Heraclitic world-spirit, which is partly reason of the universe, partly primordial matter (primordial fire), but akin also to the Zarathustrian archangel, Vohu mano ("good thought"), who is associated with Ahura as his chief agent.

This Hellenistic hypostasis of the divine wisdom is partly a metaphysico-cosmic principle of the creative process, partly the underlying essence and mediatorial agent of the historical revelation of God in the religion of Israel and in general in pious souls, making them friends and children of God and raising them up to eternal life in association with Him (Wisdom of Solomon, iii, 1 ff., v, 16 ff., vi, 12 ff.). In this hypostasis<sup>1</sup> the Hellenistic-Jewish author has attempted to combine the monistic speculations of Greek philosophy (in Heraclitus and the Stoics) and the positive belief in revelation held by Jewish theism.

He was followed in this attempt by the religious philosopher of Alexandria, Philo.<sup>2</sup> He conceived of the opposition between the infinitely lofty, unknowable and unnamable God and the sensual world as mediated by "powers," which he calls also "ideas" and

<sup>1</sup>Cp. Stave, *Einfluss des Parsismus auf das Judentum*, p. 205 ff.

<sup>2</sup>For details I refer to my treatment of Philo in *Urchristentum*, 2d ed., ii., 25-54, where all the passages here cited may be found.

"angels," among whom he distinguishes six chief ones, who surround the throne of God as his satellites, like the six Amschaspons of the Zarathustrian religion, and perform the work of the government of the world as his agents. Among these mediatorial "powers" the first place is held by the "logos," who appears to be the essence and source of all the others, and therefore to be the central mediator of all divine activity and revelation. Philo calls him "the eldest, first-born son of God, the eldest angel, the beginning, the word and the name of God, his image and the prototype of man." As the mediator of God's revelation he has a rôle at the very creation of the world, and this partly as the idea of ideas, in accordance with which the universe is formed, partly as the creative power by which everything is called into being.

The logos, therefore, is both the metaphysical ideal principle, like the Platonic "idea," and also, the real principle, like the Stoic logos. But in distinction from these philosophical principles the logos of Philo is at the same time an independent, semi-personal mediatorial being, the earliest creation of God, most closely akin to the Persian-Jewish archangels. In this latter function he is the agent of all the historical revelation of God in Israel, the real presence in all the Old Testament theophanies, for instance, in the stories of the patriarchs, and especially of the giving of the law through Moses, and he comes into a relation with the logos so intimate that it borders closely on incarnation, although this doctrine was not taught.

Furthermore, the heavenly manna in the wilderness, the miraculous flow of water from the rock and the fiery flames of the cloud that accompanied the people of Israel were all forms of the appearance of the logos, whose ultimate substratum in animistic popular metaphysics is thereby clearly betrayed.

Just as the Stoic worldly wisdom was personified in Hermes, the messenger of the gods, and as in the Egyptian Thot<sup>1</sup> the creative

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<sup>1</sup>Thot was identified with Hermes by the Greeks, and the latter, in the Stoic theology, had been made into an apparition of the divine wisdom. The kinship of this Logos-Hermes with the Logos-Christ was recognized by the early Christian apologists, cp. Justin, *Apol.* 1, 21.



spell of Ammon-Ra received independent existence as divine mediatorial beings, and in Vohu mano the creative wisdom of Ahura, and Marduk's supreme decree in the Babylonian Nabu, so Philo's logos arose from the fact that the personified creative wisdom and the word of revelation of Jahveh are identified with the worldly wisdom of the Stoa. Thus it became a composite of metaphysico-rationalistic principle, religio-positive mediator of revelation, and ideal man. As son, image and messenger of God he is at the same time the high priest, intercessor and advocate (paraclete) of men.

#### DIVINE SONSHIP IN PAGAN HISTORY.

Among pagan nations belief in the existence of sons of gods was universal, and pertained not only to mythical beings, but also to historical personages of conspicuous importance, especially to rulers and sages. In Egypt, from the earliest times up to the last of the Pharaohs, the king was regarded as an incarnation of divinity,<sup>1</sup> he was called the great and good god, Horus; prayers and offerings were made to him, and it was believed that he either fulfilled these prayers himself or else transmitted them to the celestial gods, his fathers and mothers, with whom he was in constant communication. The Egyptian kings even worshiped themselves, that is to say, the divine being, called Ka, incarnated in themselves.

An illustration in point is an extant prayer addressed to King Cherenptah. It reads: "Thou art, O King, altogether like the image of thy father, the sun, that rises in the heavens. Thy beams penetrate even the caverns. No place lacks thy beneficence. Thy words are law in every land. When thou art resting in thy palace thou hearest the words of all countries. Thou hast millions of ears. Bright is thine eye above all the stars of heaven, seeing everything that is done in secret, O merciful Lord, Creator of the breath of life!"

In Babylonia,<sup>2</sup> too, the kings from the time of Sargon, the

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<sup>1</sup>Wiedemann, *Die ägyptische Religion*, S. 92 ff.

<sup>2</sup>Radau, *Early History of Babyl*, p. 368 ff.

founder of the realm, were regarded as emanations of the godhead. Sargon's son, Naram Sin, called himself "God of Agade, Lord of the Heavenly Disk." Later this system of giving titles disappeared for a time, but was revived again by the kings of the fourth dynasty of Ur, all of whom prefixed to their names the character for God (Dingir), erected temples in their own honor, placed their own statues in various sanctuaries, had offerings brought to their own spirits and appointed the first and the fifteenth day of every month as sacred to themselves.

This belief in the divine origin of kings was so deeply rooted in oriental thought that it was extended even to foreign conquerors and rulers. When Alexander the Great had conquered the Persian and Egyptian empires he had himself announced as the son of the Egyptian god Ammon-Ra, and among his successors the kings of Egypt, and to some extent those of Syria, followed his example.

It was therefore natural that the eastern portion of the Roman empire should precede the western in its cult of the emperor. For in the former there was no hesitation about accepting the living emperor as God, i. e., as an incarnation of divinity, or worshiping him with public ceremonies, while in the Occident there was more reserve in the matter.<sup>1</sup>

To be sure, divine honor was paid in Rome to the "spirit" (genius) of the emperor, even during his lifetime, beginning with Augustus, but the majority of the emperors during the early centuries did not venture to assume the title of "God" directly. The elevation to the rank of a god ("divus") was not conferred upon an emperor until after death, and even then not upon all indiscriminately, but only upon those whom the senate considered worthy of this apotheosis (consecratio). In the Occident, therefore, the divinity of the emperor was understood as an apotheosis or the elevation of the deceased to equal rank with the gods, on account of personal merit; in the Orient, on the contrary, it was understood to be the actual incarnation of the godhead in every living emperor as such.

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<sup>1</sup>Beurlier, *Le culte impérial*, p. 52. Boissier, *La religion romaine*, I, 163. Compare the hymns to Emperor Augustus recently found at Priene.

## THE IMMACULATE CONCEPTION IN PAGAN LEGENDS.

The most striking parallels to the story of the miraculous conception of Christ by the virgin, without a human father, are found in pagan legends.<sup>1</sup> Pythagoras was regarded by his disciples as an incarnation of Apollo, and even as his son.<sup>2</sup> Concerning Plato, the legend was current among the Athenians, during his lifetime even, as appears from the funeral oration delivered by his nephew, Spensippus, that his mother, Periktione, conceived him by the god Apollo before cohabitation with her husband. On this account the Academy celebrated the memory of its founder on the birthday of Apollo. Concerning Alexander the Great, it was believed that he was a son of Zeus, who appeared to his mother, Olympias, in the form of a serpent, before King Philip wedded her. Among the Romans, Scipio Africanus and Augustus were regarded as sons of Apollo. The Pythagorean teacher and worker of miracles, Apollonius of Tyana, was thought by his compatriots to be a son of Zeus. Simon Magus proclaimed himself to be a superhuman being, born of a virgin mother, without a human father.

The common motive in these legends, so frequently found in the Græco-Roman world, is correctly traced by Origen (*Contra Celsum* I, 37) to the belief that a man of greater wisdom and strength than ordinary men must owe his physical being to a superior, divine origin. In an age that had no comprehension of natural laws, and whose fancy had been fed by the various legends of mythology about sons of gods and demigods, the most plausible assumption concern-

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<sup>1</sup>Compare Usener, *Das Weihnachtsfest*, p. 70, ff.

<sup>2</sup>Iamblichus, *De vita pythagorica*, chap. 2, mentions the old legend that Pythagoras was conceived of Apollo by Parthenis, the wife of Minesarchos, adding, however, that this is incredible, but that rather the soul of Pythagoras in its previous existence had stood in closest relationship to Apollo, and had been sent by him to mankind. But, according to chap. 19, Pythagoras regarded himself as the incorporation of the god Apollo, who had taken human form in order that men might not be confounded by the sight of divine majesty, and consequently afraid of being taught by him. Cp. John I, 14, and Barnabas v., 10.

ing extraordinary personal greatness was to ascribe it to miraculous birth and divine conception.

#### THE IMMACULATE CONCEPTION OF BUDDHA.

But the most remarkable parallel to the Christian legend is offered by the Buddhistic legend, since in the latter as well as in the former the notion of the incarnation of a preëxistent divine being in the person of the historical founder of the religion is found combined with that of his virgin birth.

The legendary biography of Buddha, *Lalita Vistara*,<sup>1</sup> which was translated into Chinese in the year 65 A. D., and is therefore without doubt of pre-Christian origin, begins with the celestial pre-existence of Buddha, where in the assembly of the gods he instructs them regarding the "law," that is, the eternal truth of salvation, and then announces his intention of descending for the salvation of the world, into the womb of a terrestrial woman in order to be born as a human being. The sons of the gods embrace his feet, weeping, and saying: "Noble man, if thou dost not remain here these abodes will no longer shine." But he leaves to them a successor and formally dedicates him as candidate for the future office of Buddha by taking his own tiara from his head and placing it upon the other's, with the words: "Noble man, thou art the one who will be endowed after me with the intelligence of a Buddha" (Foucaux' translation I, 40, chap. 5).

Thus we see that the standing epithet for the celestial being of Buddha who is assumed to precede the various incarnations is "man" (purusha) or "great man" (mahapurusha), and sometimes "victorious lord" (Cakravartin). Whether there is involved in these expressions an allusion to the god Vishnu we may leave an open question; what interests us is the relation of this notion to the Apocalyptic Jewish appellation for the preëxistent heavenly Messiah as "son

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<sup>1</sup>Foucaux, *Le Lalita Vistara*, translated from Sanscrit into French, i, viii. The above quotations are taken from this translation, which is generally recognized as the best.

<sup>2</sup>Senart, *Essai sur la legende du Buddha*, Chapters 1 and 2.

of man" or "man" (Daniel, vii, 13), (Enoch and Ezra) to the Pauline "second man from heaven," to the Gospel title for the Messiah, "son of man," to the doctrine of the gnostic Ophites of a threefold divinity, consisting of the first man, or father, the second man, or son, and the holy ghost, or mother of all the living (Irenaeus, *adv. hæreses*, I, 30), and finally and most vitally, to the doctrine of the gnostic Elcesaites, which is also the basis of the homilies of Clement, in accordance with which the heavenly spirit of Christ and king of the future world first became man in Adam, then in Enoch, Noah, Abraham, Isaac, Jacob, Moses, and finally, by a supernatural and virgin birth, in Jesus, but is to be expected in yet other incarnations whenever they shall need to save the darkened world by true prophecy (Hippolytus *Philosophumena*, 9, 10. Epiphanius *Her.*, 30, 53).

How far there may be a historical connection between that Indian doctrine of the incarnations (avatars) of the "great men" in the illuminated teachers or Buddhas of the various epochs and these Jewish-Christian doctrines of the celestial man, cannot be determined just at present. But the Elcesaitic doctrine of Clement of Alexandria, of the various incarnations of the heavenly spirit in Adam, the patriarchs and Jesus seems to me to bear such a striking resemblance to the Indian doctrine that a direct connection can scarcely be doubted in this case. And this is the more probable from the facts that the Elcesaitic Gnosticism originated with a Syrian or Parthian about the year 100 A. D., and that there existed beyond doubt at that time a close intercourse between eastern Persia and India. How long before this Indian influence had been at work upon western Asia we do not, indeed, know, and must accordingly limit ourselves for the present to the actual parallels between those Buddhistic "great men" and the Jewish-Christian "son of man," without venturing to maintain the existence of a historical interdependence.

Proceeding further with the account of the Lalita Vistara, we are told how Queen Maya asked of her husband, King Shuddhodana of Kapilavastu, permission to abstain for a time from marital intercourse, in order to lead an ascetic life in quiet seclusion. During her fast in the spring, while the constellation Puchya was dominant, it

came to pass that she saw in a dream a white elephant enter her body without harming her. She told the dream to her husband, who questioned the oracles about it. They replied with the prophecy that great joy was in store for them, for the queen would bear a son who should become either a mighty ruler or a perfect saint, a buddha and world-savior. And ten months later, when she had borne her son without spot or blemish, the new-born child straightway declared, with lionlike voice: "I am the sublimest and best thing in the world! This is my last birth; I shall put an end to birth, age, disease and death!" At this moment the earth quaked and a celestial music was heard, a supernatural light filled all the spaces of the universe, driving out darkness. All creatures were filled with supreme joy, were freed from all passion and ignorance. The sufferings of the sick were alleviated, hunger and thirst stilled, the intoxicated became sober, the insane regained their reason, the blind their sight, the deaf their hearing, the cripples their strength; the poor became rich, the captives were released and the sorrows of all creatures, even of those in hell, ceased.

#### THE HOMAGE OF THE HEAVENLY HOSTS AND OF THE WISE MEN.

Thereupon the hosts of the celestial gods and spirits came and presented to the Buddha-child and his mother their homage and their gifts, precious ointments, garments and adornments. The foremost of the gods appeared in the form of youthful Brahmins and raised a hymn of praise: "Happy is the entire world, for in truth he is born who shall bring salvation, who shall restore the world to happiness. He has appeared who by the splendor of his merits will outshine both sun and moon and dispel all darkness. The blind see, the deaf hear, the lunatics receive again their reason. Natural vices no longer torment men, for in all the world good-will prevails. Gods and men can henceforth approach each other without hostility, for he will be the leader of their pilgrimage." (*Lalita vistara*, I, 78, 88.)

At the same time there lived in the Himalayas a great seer named Asita; he perceived from marvelous signs in the heavens the birth of a prince with a lofty destiny, either as a royal ruler or as a saint and savior. He came to the royal palace in Kapilavastu to see



the new-born child and recognized in him the thirty-two signs of the "great man" (the incarnation of the celestial Buddha).

After he had seen this sign the seer Asita began to weep and to sigh deeply. To the king's question whether perchance he foreboded any danger for the young prince Siddhartha, he replied: "No, I am not weeping on his account, but on my own, for I am old and frail; but this young prince will be clothed with the perfect wisdom of a Buddha, and then he will teach for the salvation and joy of the world and of the gods as well, the law which has virtue for its beginning, middle and end, and portray it in its clearest and most perfect sense. After they have heard it from his mouth creatures, heeding the law of their development, will be entirely freed from birth and age, from disease, trouble, complaint, pain and suffering of every sort; those inflamed with the fire of passion he will cool with the water of the good law; those bound in darkness and those who wander in the evil way he will lead upon the right path of happiness (of Nirvana); those bound in the fetters of natural corruption he will free from such fetters; he will open the eyes of wisdom in the blind whose eyes are clouded by the deep darkness of ignorance; he will lead myriads of beings out of the sea of life that is surging on this side showing the way into immortality. And we! we shall not live to see the work of this precious savior! That is why I weep and sigh, for it is too late for me to receive salvation from sickness and passion" (*Lalita vistara*, I, 91-94).

#### JESUS AND SIDDHARTHA.

The resemblance of these Buddhistic legends to the evangelical story of the childhood of Jesus, especially according to the gospel of Luke, is self-evident. Moreover, there are several parallels to the account of the twelve-year-old Jesus in the temple, Luke ii, 41-52. When Prince Siddhartha was taken to school he surprised and shamed his teachers by his superior knowledge of all the 64 writings comprising the learning of the Hindu schools. Once, when he had gone into the country, in order to observe agriculture,<sup>1</sup> he became

<sup>1</sup>According to another version it was at the time of the spring festival, when the king used to draw the first furrows with a golden plow; impelled by curiosity to witness this festival, the nurse had left the young prince alone.

absorbed in pious meditation under the shadow of a tree, when five strangers, sages or saints (rishis), coming along that way, recognized by the majestic glory radiating from the future Buddha that he must be a son of God, if not the incarnation of the sun-god himself. In the meantime the prince was missed at home, and no one could answer the king's question as to where he had gone, and they began to search for him everywhere. At last he was found under the tree, whose shadow had not moved the whole day, still absorbed in meditation, surrounded by the holy men, radiant with the light of majesty, like the moon in the midst of the stars. His father was startled by this sight, but the son addressed him with the voice of Brahma, full of dignity: "Leave thy plowing, O father, and look higher!" Thus he rebuked his father's lack of higher thought and aspiration, just as the twelve-year-old Jesus rebuked his mother, Luke ii, 49. Thereupon he returned with his father to the city, and remained there, conforming to the customs of the world, but his mind occupied wholly with the thought of going away in order to become the perfectly pure being (Buddha). (*Lalita vistara*, I, 115, 118, 122.)

#### BABISM—A RECENT PARALLEL.

How deeply the notion of successive incarnations of the divine spirit in historical personages is rooted in the mind of Asiatic nations was seen even in the nineteenth century in the rise of the religion of Babism in Persia.<sup>a</sup> Its founder, Mirza Ali Mohammed, had come forward in his youth as the enthusiastic reformer of the official Mohammedan religion and the passionate opponent of the degenerate hierarchy, and he soon had a large number of adherents, who were devoted to him with worshipful zeal, (in the year 1844). The founder claimed unconditional authority, and called himself "the Bab," i. e., the gate, through which alone one could gain the knowledge of God. He believed himself to be the supreme incorporation of the divine breath or word, whose former revelations had

<sup>a</sup>This presupposes that the ceremony of the plow at the spring festival was the occasion of the boy's loss.

<sup>b</sup>Gobineau: *Les religions et les philosophies de l'Asie centrale*, p. 145 ff.

appeared in Abraham, Moses, Jesus, and Mohammed. All these divine representatives are in fact only different manifestations of the same divine being, and are all alike in having their immediate origin from God, and, being more closely united with God, return to him more quickly than other men. What distinguishes them from one another is merely the form of their manifestation, conditioned by their time. Just as Jesus was a reproduction of Moses adapted to his time, and Mohammed a reproduction of Jesus, so the Bab is a reproduction of Mohammed. But although he is in his time the supreme manifestation of the divine spirit, he is not the last, but will have successors just as he had predecessors. With this conviction the Bab went to his martyrdom with joyful serenity. He predicted that the spirit of God dwelling within him would immediately after his death pass over to one of his disciples. "The one whom God shall reveal" shall continue the work of the Bab and deliver the world from the injustice now prevailing. And, in fact, after the execution of the Bab at Tebriz (1850) his sect maintained itself under new leaders and has still many adherents. One of its later leaders, Behá (died at Acre, 1892) was regarded by the faithful as the incarnation of the godhead, and was actually called "God" and "King or Creator of Gods." But a protest was made to these preposterous claims by another party, and thus arose occasion for the discussion of the old question: What is the relation of the divine being to his human manifestation?

## II.—CHRIST AS THE CONQUEROR OF SATAN.

From the beginning it was the settled conviction of the Christian communion that Christ had come for the purpose of destroying the works of the Devil. This belief found expression in various forms.

I. Before entering upon his career as Messiah, Christ successfully withstood the temptations of Satan. According to the accounts in the gospel of Matthew (iv, 1-11) and of Luke (iv, 1-13) this

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<sup>1</sup> Brown, *The new History of the Bab*, 1893, p. 395.

moral battle between Christ and the Devil was fought in three passages, in each of which Christ gained the victory through the weapon of the Word of God. Finally, it is said, Satan left him (according to Luke, for a season at least), and angels came to him and ministered unto him. (Matt. iv, 11; Like iv, 13; Mark i, 13.)

2. Christ triumphantly proved his superiority to the Devil by casting out evil spirits from the possessed and the sick. (Mark iii, 22 ff.; Matt. xii, 24-29.)

3. In the future, at his second coming to judge the world, Christ will put an end to the power of Satan forever. This final victory over the evil spirit is divided into two scenes in the Revelation of St. John: The King of kings, coming down from heaven, with his armies, smites the nations gathered to make war upon him, with the sharp sword proceeding out of his mouth, whereupon the Devil is bound and thrown into the abyss (of hell), where he remains a thousand years under lock and seal. When the thousand years of the reign of Christ and of the resurrected martyrs are finished, Satan will be loosed from his prison, to lead astray the nations of the earth, especially Gog and Magog, and to gather them together for war upon the saints, but his armies will be destroyed by fire from heaven and Satan himself will be thrown into the lake of fire to be tormented for ever and ever. (Rev. xix, 11-21; xx, 1-10.)

Parallels to the gospel story of the temptation are found in the Buddhistic and Iranian legend. The Buddhistic story of the temptation is told in various versions; the detailed account of the *Lalita Vistara*, chapter 21, may be condensed as follows:

After Prince Siddhartha had left his father's palace, and had spent five years in monkish asceticism, he betook himself to the tree of knowledge, in order that he might by deep meditation attain complete wisdom and the dignity of Buddha. Now when Mara, the lord of the air and of all evil, recognized that his dominion would come to an end through Buddha, he called all the hosts of his evil spirits together to fight against this dangerous opponent. They hurled against him as he sat under the tree of knowledge. mountains and flames of fire and weapons of all kinds, but all their

missiles fell at his feet as flowers, or remained hanging as garlands in the tree above him.

Then the hostile demon, full of wrath and envy, spoke to Buddha: "Arise, Prince, and enjoy your kingdom, for by what merit have you gained the redemption (dignity of Buddha)?" Buddha referred to the countless sacrifices which he had made for the benefit of others in his former existences; and he called upon the earth as a witness. Whereupon an earthquake ensued, with fearful rumbling; and the goddess of Earth appeared, and spoke to him: "O great man, it is indeed as thou hast said, thou hast thyself become the supreme witness of the earth, including the gods." Therewith the demons fled as jackals do at the voice of the lion.

Now the wicked adversary called his daughters, and bade them tempt Buddha by the display of all their charms. But he remained unmoved by their allurements and instructed them with serious discourse concerning the perishable and harmful nature of deceitful lusts, so that they withdrew in shame, and acknowledged the invincibility of his virtue, and the sublimity of his perfect wisdom. Then the good spirits drew near to the tree of knowledge, and rejoiced in the victory of Buddha over the evil spirit.

Once more the fiend accosted Buddha with the demand that he give way to him, the lord of the air and of the visible world, since the aim of his striving was, after all, too difficult to be attained. But Buddha answered: "If you are the lord of the air and of the visible world, I am the lord of the law, and in spite of you, I shall gain the supreme knowledge." Thus the holy man resisted the temptations of the adversary; unshaken by threats or by allurements, he steadfastly kept the conviction of his higher vocation, and the resolve to follow it on the road of renunciation and of knowledge. And immediately afterward he attained complete enlightenment, under the tree of knowledge, and became "Buddha."

Iranian legend, too, tells of the temptation of the prophet Zarathustra by the evil spirit Ahriman, who made this proposition to him: "Renounce the good law of the worshipers of Mazda, and thou shalt have such power as was possessed by Zohak, the ruler of nations." But Zarathustra answered: "No, never will I re-

nounce the good law of the worshipers of Mazda, even though my life, body and soul are sundered; the word taught by Mazda is my weapon, my best weapon."

But the Iranian religion looks for the final conquest of the diabolic realm of Ahriman by the future redeemer Soshyans. In him we may see a sort of miraculous return of Zarathustra since he is to be born of a virgin, who is supposed to receive, while bathing in a lake, the seed of Zarathustra there preserved.<sup>1</sup>

The Iranian religion expects the future coming of this "victorious savior" to bring about the resurrection and the restoration of the world. This will be preceded by insurrection and warfare in the spirit-world. The wicked dragon Dahak, whom the hero Feridan had once conquered and bound within the mountain Demavend, will break loose from his bonds and spread disaster over the world, but he will be slain by the hero Keresaspa, who will come to life again after long sleep. Then Soshyans will cause the resurrection of all men, and will bestow upon them their reward according to their works. The ungodly will be punished three days and nights in hell, then a general conflagration of the world will destroy all evil. In the last conflict, Ahura and his archangels will overcome Ahriman and his evil spirits, who will then be annihilated in the molten metal resulting from the conflagration of the world. But for the souls that have undergone purification Soshyans will prepare the draught of immortality.

Thus the course of events in the last days is described in chapter 30 of the *Bundehesch*, a theological tract of the time of the Sassanidae.<sup>2</sup> But even before this, an ancient song in the *Avesta*<sup>3</sup> celebrates Soshyans as the conqueror of the hostile demons and the restorer of the world: "Then the King in majesty will walk with Soshyans and his other friends, when the world is formed anew, when he shall release it from age, from death, from decay and

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<sup>1</sup>Compare Hübschmann: "Parsische Lehr von Yenseits und jüngsten Gericht" in *Jahrbucher für prot. Theol.*, 1879, p. 234. Böcklin: *Die Verwandtschaft der jüdisch-christlichen mit der persischen Eschatologie*, p. 91 ff.

<sup>2</sup>*Sacred Books of the East*, V. 120 ff.

<sup>3</sup>*Sacred Books of the East*.—XXIII, 306.



corruption, so that it shall ever blossom and flourish, when all the dead shall arise, all that live shall become immortal, when the world shall be renewed according to the heart's desire, when that which is pure and good shall become changeless and permanent, when the spirit of lies shall also perish."

In the twelfth chapter of the Revelation of St. John there is handed down to us in a Christian transcription a Jewish legend of the persecution of the child-Messiah by the Devil, and the defeat of the latter by the archangel Michael. This legend has not parallels alone, but its direct source in a pagan myth of the conflict between the gods of light and of darkness. According to the Greek legend,<sup>1</sup> Leto, before the birth of Apollo, her son by Zeus, was persecuted by the earth-dragon, Python, who sought to destroy her expected son, because the oracle had predicted that the child would do him harm. But Boreas, the god of the wind, bore away the persecuted goddess, and brought her to Poseidon, who prepared a refuge for her on the island Ortygia, where the waves of the ocean hid her from the eyes of the pursuer. Here Leto gave birth to Apollo, who was so strong by the fourth day after his birth that he slew Python, the Dragon, upon Parnassus.

This myth, widely diffused in Asia Minor, as attested by coins bearing the image of Leto in flight, was first applied to the (future) Messiah in the Jewish-Hellenic syncretist circles, and accordingly underwent certain changes. To be sure, the chief features remain the same: The persecution of the heavenly child (the Messiah), and of his mother (idealized Israel), by the dragon (the Devil), and their rescue, by transportation on the wings of the wind (the eagle) to a sheltered place in the wilderness (instead of an island), bodies of water playing an important although different part in each version. But the defeat of the hostile dragon is ascribed, not to the Messianic child, which is caught up to God, but to the militant archangel Michael, who, as guardian angel of Israel, to a certain extent represents the Messiah in the world

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<sup>1</sup>See Hyginus' *Fabula* (ed. Schmidt, p. 17). Deterich (Abraxas, p. 117 ff.) first called attention to this mythical basis of Rev. 12.

of spirits. But the result of this conflict of angels and demons in heaven is not yet the complete destruction of the dragon, but only his being cast down from heaven to earth, where for a time he continues his fierce hostility to the seed of the woman until his future defeat by the Messiah.

The simple pagan myth of the persecution and rescue of the young sun-god and his speedily ensuing victory over the hostile demon of darkness is the more complicated in the Jewish interpretation, because the complete defeat of the devil's dominion upon earth is not looked for until the coming of the future Messiah, hence cannot be already ascribed to the Messianic child. Therefore this conflict had to be divided into two acts, the first of which is put into the past, as a prologue in heaven, the hero of which is Michael, while the second, the Messiah's final victory, is reserved for the future. Thus the pagan-Jewish myth of the Messiah could be more easily adapted in the Apocalypse to Christ Jesus, since he, too, is not to manifest himself fully as the conqueror of Satan until his second coming (*parusie*) being meanwhile caught up to the throne of God (by his ascension to heaven), and sheltered from all attacks.

This same myth, which is the groundwork of the apocalyptic vision in Rev. xii, comes to light again in the legend of the persecution and flight of the child Christ, as told in the gospel of Matthew. Here the mythical dragon, the Devil of the Apocalypse, is the crafty Jewish King Herod, who seeks the life of the Messianic child, and orders the massacre of the children at Bethlehem. Here, too, the mother flees with her child, not into the wilderness, however, but to Egypt, because the young Messiah was to be called out of the same land from which Israel had once gone forth, that the word of the prophet, Hosea xi, 1, might be fulfilled.

This legend likewise has a number of prototypes in the legends of heroes: in the rescue of the child Moses, by the Egyptian princess (*Exodus ii*), likewise in that of the Assyrian prince, Sargon, who, when his uncle sought his life, was placed in a basket of reeds in the Euphrates, and was rescued and reared by a water carrier;<sup>1</sup>

<sup>1</sup>Smith, *Early History of Babylonia*, 46.

in the Hindu myth of the god-man Krishna (the incarnation of the god, Vishnu), whose life was sought by his uncle, King Kansa, who commanded that all boys of the same age in his dominion should be killed; by Krishna was hidden in the hut of a poor shepherd and brought up by him.<sup>1</sup> In the same way, the young Persian prince, Cyrus, was to be killed, by command of his grandfather, Astyages, but was spared by the shepherd commissioned to do the deed and was brought up by him as his own child.<sup>2</sup> There is a similar tradition about Augustus:<sup>3</sup> that before his birth, the Senate, impelled by an oracle, foretelling the birth of a Roman king, had issued an edict, ordering that all boys born in that year should be killed, but the parents of Augustus did not obey the decree.

All these legends doubtless have their source in nature-myths like the myth of Leto and Apollo, and they all have a common motive which is easily recognized. The value of the conspicuous life of a hero is to be enhanced by the fact that the powers of light and of darkness contend over his existence from the very beginning. The life of the child is to show in the prologue what is to be later the life-task of the hero; the divine principle of life and of light, of goodness and truth, is to gain the victory over the hostile forces of the universe.

### III. CHRIST AS THE WONDER-WORKING SAVIOR.

Although Jesus himself spurned the suggestion that he should work startling wonders, and sharply rebuked such a desire as be-tokening of a perverse spirit (Mark viii, 11 ff.; Matthew xvi, 1-4) it was inevitable that faith should adorn the image of Christ with a rich wreath of miraculous stories. This was the natural consequence of belief in his Messiahship, for even according to Jewish expectation, the Messiah was to repeat and surpass the miracles of the holy men of the Old Testament, and of belief in his divine sonship, for it

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<sup>1</sup>Wheeler, *History of India*, i., 462, ff.

<sup>2</sup>Herodotus, i, 108 ff.

<sup>3</sup>Seutonium, *Octavianus*, 94.

seemed a matter of course that the supernatural spirit with which he was filled or by which he was begotten should reveal itself even during Christ's earthly career, by supernatural powers. The miracles of the Gospels are partly those of knowledge, partly those of power.

1. Miracles of knowledge:

- a. Miraculous insight into the innermost thoughts of men. (John ii, 25.)
- b. Foreknowledge of future events (prophecy of the passion, the resurrection and second coming).
- c. Miraculous knowledge of past occurrences, as well as of those contemporaneous but far distant. (John i, 48; iv, 17; xi, 14.)

2. Miracles of power:

- a. Casting out of demons from those possessed.
- b. Healing of other sick people.
- c. Awakening of the dead.
- d. Miraculous power over matter and the forces of nature (multiplying the loaves, changing water into wine, calming the storm).
- e. Freedom from the limitations of space and matter (sudden disappearance and reappearance, passing through closed doors, walking upon the water, ascension to heaven). John vi, 19 ff.; Luke xxiv, 31, 36, 51; John xx, 19, 26.

Countless parallels to these marvelous stories are to be found in the legends of pagan heroes and Christian saints. It will suffice to mention a few examples.

In the Buddhistic legend the miracles of knowledge play an important part. Buddha knows not only his own previous births and careers in all their details, but he knows those of others that come into contact with him, their merits and their faults in former existences, and often explains conversion to the ranks of his disciples as the result of merit in a previous existence (the Hindu form of predestination). Moreover, he can penetrate the thoughts of all beings, from the very lowest up to great Brahma himself: "What-

ever passes through your mind is revealed to me. Ye may deceive others, but me ye cannot deceive."<sup>1</sup>

But when, at the beginning of his active career, his opponents, at the instigation of the devil Mara, challenged him to manifest his superiority to the holy men, revered hitherto, by performing miracles in the presence of the King and the people, he replied: "I do not teach my disciples to go and work miracles before the Brahmins by supernatural power, but this is what I teach them: So live, ye pious men, as to conceal your good works, and to reveal your sins."<sup>2</sup> Nevertheless, in this very connection, the legend proceeds to relate how Buddha shamed and subdued his stubborn foes, by a succession of the most astonishing miracles.

When the King, listening to a false accusation against his innocent brother, ordered the hands and feet of the latter to be cut off, Buddha heard from afar the prayer of the unfortunate man, and immediately sent his favorite disciple with the commission to heal the maimed sufferer by pronouncing the sacred formulas of the Buddhistic law. Scarcely were these words spoken, when the body of the prince resumed its former shape, and he, being healed by the power of Buddha, at once manifested supernatural powers, and entered the ranks of the master's followers. Further we are told that fire broke out in the house where Buddha was lodging, but it was quenched of its own accord without doing any damage; that Buddha, by stamping on the ground, produced a fearful earthquake that shook all parts of the earth; that the spirits of the air caused a shower of flowers to fall upon him, and heavenly music to resound; that Buddha, while absorbed in deep meditation, lifted himself up in the air, and that while hovering in the bright atmosphere, wondrous flames of all colors radiated from his body. These "transfiguration scenes" are frequently repeated in Buddhistic legend.

In the Occident, the early centuries of the Roman empire were the ages of the most flourishing belief in miracles and soothsaying.

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<sup>1</sup>R. S. Hardy, *Manual of Buddhism*, 190.

<sup>2</sup>Bournouf. *Introduction a l'histoire du buddhism*, p. 151 ff.

The old legends of Hercules, Orpheus, Æneas, Romulus, Esculapius and Pythagoras were told by poets and by historians as stories handed down and therefore trustworthy, and were amplified to please the taste of the reader. The historian, Diodorus Siculus,<sup>1</sup> reports, concerning Hercules, that all his life long, as is commonly narrated, he endured great hardships and dangers, in order to acquire immortality by his benefits to humanity and he recounts in detail the marvelous deeds of this hero till he is finally borne away from the funeral pile to Olympus.

Pausanias<sup>2</sup> tells us that Esculapius, being exposed to death, when an infant, by his grandfather, was found by a shepherd who recognized by the glory radiating from the child that he was divine. The rumor spread immediately that this divine child could heal the sick and revive the dead. At the time of a pestilence Esculapius is supposed to have come to Rome in the form of a serpent, and to have continued his miraculous healing there for centuries. He is reputed to have awakened ten persons from death. But because he awakened Glaukos, son of Minos, Jupiter killed the wonderful physician with a thunderbolt and placed him among the immortals. As the god of healing he continued his works at his shrines, among which those at Epidaurus and at Rome were especially celebrated as resorts for pilgrimages. During the early centuries of the empire he was considered the most "benevolent" god, from whom help was sought in all troubles of body and mind, and his temples were full of votive offerings and the inscriptions of those that believed they had received help from him. He is said to have appeared in person to some that were sick like the Egyptian god of healing, Serapis.

Even among the philosophers of the Platonic and the Stoic, the neo-Pythagorean and the neo-Platonic schools, the popular belief in miracles and revelations found zealous defenders, who found lines of connection between it and their doctrines of divine providence and of mediatory beings (dæmons) and used its authority as a support for their own doctrines. In these circles especially the old legends

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<sup>1</sup>*Hist.* I., 2; IV., 8-39.

<sup>2</sup>*Periegesis* II., 26.



of Pythagoras, the founder of the religio-political covenant, were transmitted with fondness and transmuted into an ideal figure of a god-man, a prophet and a miracle-worker. According to the biography of Iamblichus he was not merely the son of Apollo, but his actual bodily incarnation. Aside from his miraculous prophetic knowledge (a knowledge of his previous existences is also ascribed to him, which suggests Buddha), a quantity of the most astounding miracles are told of him, he cured the sick, suppressed a pestilence by magic, stilled the floods of the ocean and of rivers so that his disciples could pass over them unharmed, while the spirit of the floods addressed him by his name in a clear voice that was heard by all. Furthermore, he had been present among his disciples in two distinct places separated by land and sea (at Metapontus in Italy and Tauromenium in Sicily) on one and the same day—an independence of the limitations of space such as frequently occurs in the legends of Buddha.

The neo-Pythagorean school, however, was not satisfied merely with honoring the ideal of the wise and miracle-working god-man in their old founder, but they claimed that it had reappeared in the Pythagorean Apollonius of Tyana (d. about 96 A. D.), whose biography was written about 220 A. D. at the order of the Empress Julia Domna by the rhetor Philostratus.<sup>1</sup> He has a quantity of miracles to tell of his hero both in knowledge and power. He is said to have foretold various future events such as the revolt of Vindex against Nero, the short reign of Galba, Otho and Vitellius, the death of Titus, the sinking of a ship, etc. Being in Ephesus at the time he saw the murder of Domitian as though he had been present; while in the midst of a conversation with friends he suddenly became silent, looked fixedly before him, and then exclaimed, "Down with him, the tyrant!" Thereupon he explained to his surprised friends that Domitian had just been murdered. Soon afterwards the news arrived that this had in fact taken place in the very same hour.

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<sup>1</sup>Cp. Baur's Treatise "Apollonius and Christ" in three essays on the history of ancient philosophy, ed. Zeller, 1876.

Apollonius also understood all the tongues of men and of animals and could read even the hidden thoughts of people. He freed the city of Ephesus from the demon of the pest, recognizing him in the guise of a beggar and causing him to be stoned, whereupon a great dog was found beneath the stones. At Corinth he unmasked in the bride of one of his disciples a man-eating empusa, or feminine vampire. At Athens he recognized in a young man, who interrupted his discourse with rude laughter, one possessed of an evil spirit, and commanded the demon to leave him with some perceptible sign. Thereupon the demon announced that he would overturn the statue standing in the hall, and forthwith this statue moved and fell down; but the youth was healed from that moment and restored to his right mind. In Rome he met a funeral train which was conducting to the grave the corpse of a young girl accompanied by her mourning lover. He stepped up and bade the bearers stand still, saying that he would dry the tears of the mourners. They thought that he was intending to deliver a consolatory address, but he laid his hands upon the girl and murmured over her some unintelligible words, whereupon she arose, began to speak and returned to the house of her parents. The father attempted to express his gratitude to the savior of his child by a considerable gift of money, but Apollonius refused to accept it, directing that it be devoted to the trousseau of the bride. The biographer remarks, moreover, that we may leave it an open question whether we have here a case of the arousing of one in a trance or of the restoration to life of one actually dead, the same dilemma that presents itself to us in the New Testament accounts of the raising of Jairus' daughter and of the son of the widow of Nain. (Mark v, 41 f.; and Luke vii, 12 ff.)

All these and other similar miracles of Apollonius had a beneficent and philanthropic purpose, serving for the relief of those suffering from all sorts of ills; but some stories are told in which he himself is the person involved in danger, among them the following: When he had been thrown into prison on the order of Domitian and loaded with fetters, a friend asked him when he would probably be freed. He replied: I will give you here a proof of my liberty, shaking off his chains. But then he voluntarily put them on again,

and the disciple recognized his miraculous power. This miracle with its transparent symbolism—the superiority of the saint to all the power of a hostile world—recalls the miraculous release of the apostles Peter and Paul out of prison (Acts xii, 7; xvi, 26) and the falling down of the Roman cohorts in Gethsemane at the word of Jesus (John xvii, 6).

The legends of the miracles of the Christian saints are in the same line with those of the Pythagorean. The apocryphal acts of the apostles are full of the most remarkable miracles which the apostles are said to have performed among the heathen for the confirmation of the truth of their gospel. According to the Acts of Peter,<sup>1</sup> for instance, Peter drove out a demon from a young man in Rome, and as the demon in leaving overturned and broke a statue of one of the emperors, Peter restored it by the magic power of the holy water. Again, he restored to life a salted herring, gave sight to several blind widows, had a babe proclaim in the voice of a man the punishment impending over Simon Magus, while a dog with a human voice challenged the Magian to a contest in miracle-working. The Magian offered to bring back to life a dead man, whom he had himself killed by his magic arts, but he succeeded only partially, as the man died again immediately. Peter, on the other hand, before the eyes of the Roman people and of the prefect of the city, raised three dead men in succession to new and complete life and cured many sick besides. But when Simon Magus thought to outshine all these miracles by his own ascension into Heaven in bodily form, the attempt at flight was frustrated by the prayer of the Apostle, the Magian fell from a great height and was killed.

When on the persuasion of his friends Peter was about to evade martyrdom by flight, Christ met him at the city gate and replied to the question where he was going, "To Rome, to be crucified again." Peter immediately turned about, was condemned to death on the cross and asked from humility to be crucified head downwards. When this was done, the crucified apostle comforted his mourning friends in a mystical address on the mysteries of the cross, while

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<sup>1</sup>Lipsius, *Apokryphe Apostelgeschichten*, II, 1.

angels with wreaths of roses and lilies stood about him. But after his death he appeared frequently to his followers and admonished them to remain faithful. But he appeared to Emperor Nero also in a vision, gave him a fearful beating and commanded him to leave the Christians in peace thenceforth.

This reappearance of the martyrs after death to comfort their mourning church is very common, one might almost say a standing feature of the legends of the saints, which must certainly rest upon actual psychic experiences, such as visions and hallucinations.

From the great abundance of church legends of miracles we call attention to two instances from early and middle-age history. In the last book of his work *De civitate Dei* (XXII, chap. 8) Augustine raises the question why such miracles no longer occurred as in the accounts of the gospel time. And he makes answer, first, that they are no longer so necessary as in those days when they were intended to convert the world to the faith, whereas anyone who still required a miracle to help him believe was himself a miracle, refusing to believe in spite of the belief of the world. Besides, he goes on, miracles do still occur in the name of Christ, either through his sacraments or through the prayers or the memorials of his saints, only that these current miracles no longer attract such worldwide attention as those earlier ones.

And then he tells a series of stories of miraculous occurrences from his own time and partly from his own immediate environment. In Milan the bones of the martyrs, Protusius and Gervasius, had been found by means of a revelation in a dream to Bishop Ambrosius, and on the occasion of the resulting celebration a blind man had been cured before the eyes of all those present. In Carthage he had been an eye-witness of how his host Innocentius had been suddenly cured through the prayers of himself and his friends of a dangerous ulcer on which an operation was about to be performed. At the same place a pious woman who suffered from cancer of the breast was cured by a newly baptized convert who made the sign of Christ (the cross) on the diseased part. A physician who suffered from the gout was cured of his disease by baptism. A bit of holy earth, which had been taken from the grave of Christ at Jerusalem and

brought to Carthage, expelled the spirits from a haunted house and cured a youth who was lame. In Hippo a maiden was freed from a demon by being anointed with oil which had been consecrated by the tears of the presbyter who was praying for her. In Hippo, too, a miraculous answer was vouchsafed to the prayer of a poor shoemaker addressed to the twenty martyrs for which the place was celebrated; on the shore he found a great fish and in its belly a gold ring; thus the martyrs fulfilled his request for the means to procure clothes. At the celebration of the anniversary of the glorious martyr Stephen, a blind woman was cured by the flowers that had been blessed by the bishop. At the head of the bed of a prominent heathen were laid, while he slept, flowers from the altar of the martyr, and he was moved overnight to the acceptance of the baptism, which before that he had steadfastly refused. A boy who had been run over by an ox-cart and mortally injured was taken to the sanctuary of the martyr and there restored forthwith to his previous complete health. Finally the same martyr caused several restorations from death in this fashion; a garment, consecrated by the relics of the saint, was laid over the corpse, or the body was anointed with oil consecrated in the same way, or it was carried to the holy spot and there laid down while prayers were said over it. "And accordingly," Augustine concludes, "many miracles are still accomplished by the same God, through whom and by what means he will, who performed those of which we read in the Holy Scriptures. Only the former do not become so widely known."

The official biography of St. Francis of Assisi, the founder of the order of Minorites or Franciscans (d. 1226) was written by the general of the order, Bonaventura, in 1260. In this version of the legends of the saint he reports a great number of miracles which are said to have been reported by the first disciples and friends of the saint, accordingly by alleged eye-witnesses. St. Francis kissed a leper upon his very wounds and straightway the leprosy disappeared. In the desert he and his comrades were fed with bread from Heaven. He maintained an entire ship's crew upon a long voyage with the miraculously increased supplies from his wallet. Like Moses he caused water to flow from a rock, and like Jesus he

turned pure water into the best of wine. In an assembly of the brotherhood the saint, who was bodily absent, was suddenly seen hovering in the air and blessing the assembly with outstretched arms. The saint was upon an intimate footing with animals; he preached to the birds and they listened to him attentively with outstretched necks; the swallows with their noisy twitter interfered with his address, but on his commanding it they were instantly still; he admonished a wolf to cease from murdering and the beast gave him his paw upon it and became from that moment a tame domestic animal.

The most famous of all is the miracle of the stigmata: During the latter years of his life the saint is said to have borne on hands and feet and side the marks of the wounds of Christ in the form of scars, which bled from time to time, the oldest accounts differing as to the origin and exact nature of the wounds. Later legend spun out this miracle into a series of forty resemblances between Saint Francis and the life of Jesus. Finally, the number of cures from disease, restorations to life, rescues of the shipwrecked and others, which were accomplished by the departed saint, is unlimited. "His memory was so revered that there was a familiar saying regarding him, 'Exaudit quos non ipse audit Deus.' Thus he is more merciful than God himself. This sounds like blasphemy, but it is only the essence of all the worship of the saints frankly expressed."

OTTO PFLEIDERER.

BERLIN, GERMANY.

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<sup>1</sup>Hase, *Kirchengeschichte*, II, 387.



## THE COMING SCIENTIFIC MORALITY.

THE object of the following article is to show in a concise form the real origin of morality—the dependence of morality upon fundamental scientific principles and the relation of science to good and evil. It proposes no revolutionary ideas, but illustrates the gradually coming effects of scientific knowledge upon the moral sentiments and conduct of mankind. The subject is treated in a comprehensive manner, because the ordinary treatment of morality introduces numerous contradictions.

### a. THE REAL FOUNDATION OF MORALITY.

The subjects of science and morality appear so very unlike that it is commonly believed they have no connection with each other; a chief reason for this is, morality is so very much more complex than mechanics, with which it is usually compared, that we cannot so readily understand it. If we examine books on morals we find that notwithstanding human bodies and brains are material substances constantly influenced by numerous scientific conditions, little or nothing is said in them about any scientific relations of the subject. As this fundamental omission requires notice, I beg leave to say a few words on the question, but owing to its inherent complexity and its numerous seeming contradictions, it is impossible to make it clear to all persons, and, as inherent qualities are permanent, the only remedy for this is a prepared mind and attentive reading.

Notwithstanding the seeming absence of any connection between science and morality, I will endeavor to show that the chief principles of science are the great guides of life, and are not only essentially

related to morality, but actually constitute its primary foundation. On the authority of sufficient evidence I venture to affirm that the only permanent basis of morality is immutable truth, and as well-verified science is the most perfect truth we possess, we may reasonably expect to find a fixed basis of morality in it.

By the term "science" I mean knowledge derived from proper and sufficient evidence; by "morality" I mean such human conduct as produces justifiable effects on sentient creatures; by "immorality" the infliction of unjustifiable injury upon living beings, and by truth I mean statements consistent with all known facts. The terms "truth" and "science" are largely synonymous, and as science and dogma are incompatible there is no dogmatic science; dogma is not knowledge. Although our knowledge of science is not yet to any large extent absolute, it is gradually becoming so, and is even now very certain in some of its parts. Thus we know to a second of time the periods of coming eclipses, and he who cannot believe that the sun will rise to-morrow because it is not "absolute knowledge" must "sit still and perish." Knowledge and belief are very different; by means of proper and sufficient evidence we may be gradually led to know all things, whilst without evidence we may believe but cannot know anything; the most moral course is to proportion our faith and belief to the evidence.

As natural agents, such as alcohol and our environments, influence our moral conduct, and pain and pleasure are states of the nervous system, morality is a part of science. According to all related evidence, the permanent basis of morality lies in the great principles of universal motion, universal causation, continuity of cause and effect, action and reaction, etc., all of which have been abundantly established by original research. With these truthful principles to guide us, all logical thinking on the subject leads to truth.

As all material phenomena, manifestly those of astronomy and physics, constitute a perfect and orderly system, a correct verbal representation of them must be a perfect system of truth, and as universal causation and motion present a similar system I venture to say that they are a safer foundation of morality than any unprovable

statements can possibly be; they are also more reliable guides of conduct than instinct or feeling alone, because moral conduct is a result of feeling after it has been corrected by intellect and training. In the very complex subject of morality, unless we know what is right, we often cannot do it, and even if we do know we often act wrongly, simply because the stronger powers of feeling and desire compel us. Perfect integrity requires ability.

b. DEPENDENCE OF MORALITY UPON UNIVERSAL MOTION.

Unceasing internal motion exists in all material bodies (including human beings), and in the universal ether which pervades all substances and all space. We know nothing of the first cause of it, but we know that it is practically indestructible, that when it disappears it either becomes stored up or reappears in another form or place, and that it is continually being transferred from one body to another by radiation through the ether. The chief proofs of this are the phenomena of conservation of energy and of universal change. We know that this motion differs in form in every different substance, because each substance produces a different spectrum, and we consider that these differences of form of motion are the cause of the unlike properties of different bodies, because when we confer new movements upon a body it acquires new properties, thus a straight chain acquires rigidity when caused to move rapidly in the direction of its length; the gyroscope and Foucault's pendulum are other examples. We know further that bodies of unlike properties act frequently and spontaneously upon each other by mere contact; chemistry furnishes us with an immense number of such instances. They also act by radiation through the ether, thus their spectra, such as those of the sun and of white-hot coke, produce different effects upon a photographic surface, etc.; a mere look may cause hatred.

All material substances are extremely complex, and we can only faintly realize the great feebleness of our perceptive powers in relation to them and their movements. The extremely minute molecular motions of the simplest substance entirely surpass our powers of perception and comprehension; spectrum analysis has shown that

the internal movements of the smallest particle of white-hot iron "are more complex than the visible ones of the entire solar system."

Evidence already existing is abundantly sufficient to prove that all bodies (including ourselves) are not only in a state of constant internal motion, but also of continual change of motion; that the cause of this change is largely the unlike properties of different bodies which enable them to act and react upon, and alter, the properties and motions of each other, as we see so often in cases of chemical union, etc., and that all actions, including those of ourselves, occur in accordance with law. Such great truths as these are of the utmost value to mankind, but are not readily accepted, largely because ordinary minds are not sufficiently scientific to receive them. As an example of this, about 300 years ago the English philosopher, Hobbes, said: "There is only one reality in the world; it is movement, external, without beginning, the cause of each and every change." Partly owing to the limited evidence existing at the time in proof of this hypothesis, his idea was neglected, but the evidence in its support has now become so vast that we are compelled to adopt it as a settled truth.

This universal motion in our organs and environments causes our experiences; our experiences and inferences from them produce our ideas, and our experiences and ideas cause our actions through the medium of our nervous system. When our environments act upon our nervous centers the latter, by unconscious "reflex" or "automatic" action through the nerves, largely cause our bodily movements and the changes in our organs. Nearly every organ in our body acts automatically during sleep, and more or less during the waking state; the heart acts automatically at all times, the lungs breathe automatically, the brain thinks automatically during dreams and partly so during the waking state; we walk automatically until we come to a difficulty, and then the conscious intellect, excited by the stronger impression, operates and prevents an accident. Most of the actions, especially of untrained persons, are automatic. When we cease to automatically move we die. Automatic actions have no moral quality because they do not involve conscious intellect.

In nearly all cases of physical and chemical action there are

conversions of energy from one form into another, and in all such cases practically no energy is created or destroyed and the total effect is equal to the total cause; this is well known as the principle of universal equivalence and the conservation of energy. Similar conversions take place in us; thus the latent energy contained in food and air gives rise to vital power. Nearly every such act, whether in living things or in dead ones, is, however, attended by dissipation of energy, usually in the form of heat; thus muscular energy warms our bodies, and thinking makes the head hot, and the dissipation of power in a steam engine and boiler between the furnace and fly-wheel is quite 87 per cent. Through similar dissipations of energy within us our "reflex" actions are often weaker than our direct ones, and we know that intellect is often weaker than the animal feelings out of which it arises. It is apparently by process of conversion of energy that our intellectual acts are produced by prior material ones, thus the energy of oxidizing cerebral tissue is accompanied by mental action. We know that one direction of visible motion in a machine can be converted into another, for instance, reciprocating into circular, etc., and as the laws of motion of small bodies are the same as those of large ones it is reasonable to conclude that one kind of invisible molecular motion can be converted into another in the human body and brain as certainly as visible motion is in an inanimate machine. The usual cause of conversion of energy and of the changes occurring in nature is difference of property and motion of adjacent substances.

All cases of morality as there defined are instances of action and reaction, chiefly between human beings and between men and other animals; also between each man and his environments, and between his brain and his bodily organs; thus the mere sight of valuable property causes the thief to steal, and bodily feelings excite moral and immoral ideas. We are always under the influence of motion, from within and without, from the cradle to the grave, compelled to act or to refrain from acting, and are equally obliged to accept, sooner or later, some of the consequences, whether pleasant or painful, of our conduct. This is not fatalism, because scientific effects are always conditional, whilst fatalistic ones are entirely uncondi-

tional. Similar to all other material bodies, man is inexorably bound by law and circumstances, though he often does, not like to think so, because it curbs his desires.

The world is not governed essentially by what we with our narrow ideas consider "justice," but by material necessity, and it is only when acts of natural causation happen to agree with those ideas that we consider them just. We are so ignorant and conceited that we forget our littleness, and cannot believe that great terrestrial powers, such as earthquakes, lightning, etc., are just toward us. Why do the weak yield to the strong in all cases? It is simply because all natural actions are essentially of a mechanical nature. In consequence of difference of circumstances and property in every different substance, all bodies act and react upon each other, and each governs in proportion to its power; the large celestial globes govern the small ones, and the small ones react upon them; the stronger animal feelings govern the intellect and the latter react and in a less degree govern them. The powers of all bodies are limited by their mass and their motion, and by the fact that they cannot simultaneously possess contradictory properties; the existence of one property necessarily limits that of its opposite; thus a body cannot be soft and hard, brittle and tough. According to some writers, even a Deity cannot possess incompatible powers, thus: "How can infinite justice exact the utmost penalty for every sin, and yet infinite mercy pardon the sinner?" (Dean Mansel.)

As natural laws are invariable, the actions of all material substance are regulated, each celestial body has a definite speed of motion, and human progress has a definite rate, we cannot "hurry up a millennium." The rate of human progress depends largely upon fixedness of human habits, and upon the fact that when an idea has been firmly impressed upon the brain it remains until death and prevents the reception of new ones. Human progress is a very complex phenomenon, and its rate is not measurable by us; but, notwithstanding this, its rate must be as fixed as that of the earth in its orbit, because it depends upon the same ultimate causes and laws. It is the discovery of new knowledge which enables mankind to advance, and the diffusion of it maintains the state attained.



All change requires time, and dissimilar bodies require different periods to alter without injury; human beings have often to make many preparations in order to prevent great loss and suffering caused by change. If any substance is too rapidly strained it is damaged; a stick, too quickly bent, breaks; overstrained metals suffer permanent change, and men do not entirely recover from greatly injured moral character.

In our own individual case our actions *seem* to be regulated by energy of volition, but as volition is not an uncaused phenomenon and cannot of itself create energy, we are really governed by the internal and external influences which cause our volitions. A steam engine seems to be regulated by its "governor," but the real energy exerted through that contrivance is that of the steam. Notwithstanding our seeming volitional power, we are nearly as helpless in the power of universal energy as the dust of a road is in the rush of a hurricane. Man desires, but energy performs, apparently in every case; we are incessantly governed by climate, temperature, tides, state of bodily health, etc. All men are more or less controlled by ignorance, largely in consequence of deficiency of knowledge, disease and accidents kill millions of men prematurely every year. Very few die simply of old age, for in every man

"There is always somewhere a weakest spot,  
Above or below, within or without,  
And that is the reason, beyond a doubt,  
A man 'breaks down,' but doesn't wear out."

O. W. HOLMES.

All substances more or less govern all substances at all distances by means of radiations, and as we are material bodies, radiant energy largely governs us; thus we are held fast to the earth by rays of gravity, and are kept alive by rays of heat from the sun; we are also affected by rays of light, rays from radium, etc.

Man is a storehouse of energy derived from the food and air he consumes and the heat of the sun potentially contained in it. He is a structure in which energy is always active, with nervous organs for consciously or unconsciously liberating it, and producing either moral or "immoral" effects. Energy continually flows through him,

it enters his body in the food and air he consumes and escapes largely as bodily heat and movement. His body is always being consumed and renewed, and appears to be as truly kept in action by the energy of chemical union of the oxygen in the blood with his tissues as a steam engine is by the oxidation of the coal in its boiler furnace.

### c. SCIENTIFIC VIEWS OF LIFE AND MIND.

All kinds of errors are obstacles to the spread of morality. Books, etc., are continually being written without definitions of the chief terms used in them. Through neglect of properly defining of terms, and of limiting their meanings, the idea of universal molecular motion has been in some cases misused, thus the well-known self-repair of crystals, and the spontaneous recovery of metals from internal strain have been spoken of as "life in crystals" and "life in metals." That inanimate bodies, minerals, magnets, etc., potentially contain the rudiments of some of the properties of animals, such as action and reaction, is quite true, but we require definite terms to indicate complex abstract idea, such as life, mind, spirit, etc., and it is misleading to call the invisible molecular motion of metals a crystal "life," because, as far as we know, "life" only exists in organic cellular structures.

The abstract idea of universal molecular motion is very similar to that of a Deity, and many persons have unscientifically spoken of God as being "an all-pervading mind." It is true that such motion has the qualities of omnipotence, omnipresence, infinity and invisibility, but it has not that of personality; nor is it really "mind," because the existence of mind in the absence of nervous substance has never been proved.

The idea of the existence of a "mind" or "soul" as a separate entity, whether in the body or out of it, is another error opposing moral progress. It is really only a mental abstraction of our collection of thinking faculties; the independent existence of mind has never been proved, and the idea has for ages deceived millions of

persons, and even if such an entity did exist, we have no proof that it creates energy with which to perform mental actions; if also, as science infers, such actions are really caused by natural influences under physiological conditions, there is no need of a separate entity or "spirit" to produce them. The mere ethereal or mysterious nature of a substance or action does not warrant our calling it a "spirit," "spiritual" or "supernatural."

The idea of the existence of a "second self" within us is another unproved assumption, and appears to be explicable by ordinary physiology. Under the influence of suitable stimuli all our organs act "automatically," the legs walk, the lungs breathe, the heart beats, without supervision by the intellect. Similarly, under the stimulus of indigestion, cerebral excitement, etc., the brain thinks during dreams, and this kind of thinking has been attributed to a "second" or "subliminal" self within us. Thought, whether conscious or unconscious, if uncorrected by intellect and training, is often unhealthy, and sometimes dangerous. In the *conscious* state, in men and women, all kinds of crime are committed under its influence; similarly with animals, they have less intellect than men and are audaciously guilty of instinctive deceit, theft and murder. In the *unconscious* state, as in dreams, even suicide and murder have been committed, and many somnambulists have seriously injured themselves. Nevertheless, in highly intelligent and trained persons dreams are occasionally correct, and acts of thinking have on rare occasions been performed during them which could not have been done in the waking state, in consequence of disturbing influences. As dreaming, somnambulism, trance, etc., are reasonably explicable by ordinary physiological automatism, there is no need of the assumption of "a second self" to explain them.

We may approximately limit the term "mind" or "soul" to the collection of faculties or actions termed consciousness, observation, comparison, inference and imagination, and, as far as we know, these exist only in living nervous organisms. Further, in the long series of living structures, from plants up to man, wherever mind appears, there also is nervous substance. Mind is a species of

life, and life may be scientifically viewed as a kind of motion, but motion alone, separate from organic structure, is neither life nor mind; metals and crystals have internal motion, but do not live. Wherever mind exists questions of morality begin to arise, because moral action is largely mental, and mental action is produced, as far as we can infer at present, partly by oxidation of living nervous substance. Sooner or later, by the aid of new discoveries, life and mind will probably be much more precisely defined as particular forms of internal movement, occurring only under special conditions in suitable organisms, but as the human intellect is nearly powerless in such profound and complex questions without the aid of proper and sufficient evidence, we must work and wait for more discoveries.

In consequence of insufficient knowledge of scientific principles and of how to use them in explaining mental phenomena, a great mystery has been made of consciousness. Consciousness and attention are largely synonymous; each consists merely of a high degree of activity of the senses, and this increases with the strength of influence of the environments upon them; the stronger and more sudden that influence and the more excitable the senses, the more vivid the attention and consciousness. Consciousness is largely increased by the perception by one sense of the action of another in the same organism, and there are all degrees of it. Perfectly automatic actions, such as those of some of the viscera in a healthy state, are not usually noticed by the senses, whilst those which are violent or are accompanied by great pain or pleasure are strongly perceived, and when several senses are simultaneously and strongly excited each one perceives the excitement of the others, and, by coöperation, heightens the effect; thus if we suspect a great danger close at hand, such as our house on fire in the night, several senses are excited; we see, smell and taste the smoke, we hear the sounds of burning, we feel our heart beating, and feel and see our body trembling, and each sense perceives, more or less, the excitement of the others, and thus increases the total feeling. Consciousness is intimately related to morality; the more conscious we are of our actions the more accountable are we considered to be for them.

*d.* DEPENDENCE OF MORALITY UPON UNIVERSAL CAUSATION.

Next in importance to the dependence of morality upon universal motion is its relation to universal causation. Abundant evidence exists to prove that moral and immoral actions are as much cases of cause and effect as motion produced by steam, and the great assumption that some natural phenomena are produced without a natural cause has never yet been proved; all men are caused to perform acts of "good" and "evil," friendship and enmity, by the influences within and around them. In some cases many causes produce a single effect, as in the maintenance of a good character, whilst in others a single cause produces many effects, as in the sudden destruction of that character by a criminal act. Given unlimited time, the smallest cause may produce a very great effect, as continually occurs in the washing away of mountains by rain, and in the gradual loss of moral character by habitually telling small untruths. In other cases the number of causes between the earliest one and the effect are many, but this, like the number of links in a chain, makes no difference in the result, provided all the intermediate connections are certain. Lapse of time, also, has no influence; thus we are as certainly descendants of the first human couple and inheritors of some of their moral qualities, as of our immediate parents. Many persons want to know "the first cause of all things," not thinking that this is quite beyond our feeble powers and that every cause must have had an earlier one to produce it. Causation acts as surely in a complex machine as in a simple one, in a man as in a windmill, in morals as in mechanics, provided all the necessary conditions are present. This statement is based upon the great principles of indestructibility of motion and continuity of cause and effect, but the degree of certainty in morals *seems* to be less than in mechanics, because the more numerous conditions confuse us; nearly the whole of our difficulty in understanding complex subjects arises from the smallness of our knowledge and the very limited powers of the human brain. As moral qualities are not often measurable, it is not much wonder that we cannot assess moral values.

Under the influence of universal motion and causation, acting according to invariable laws, all material bodies, ourselves included; "do as they must," and we are so far justified in all our actions, whether moral or immoral. Some persons are alarmed at this great scientific statement, as if it were wrong to submit to greater powers than our own, but whether we consider it right or wrong, we have no choice in the matter; even the great globes in space are compelled to obey, and why should not we? It might be supposed that if this was true it would render unnecessary all praise and reward, punishment and blame, but as causation is not suspended in the mutual presence of any two bodies, we are still compelled by the influence of our environments to encourage "right" and discourage "wrong" by all the ordinary means. We may reasonably conclude that even the greatest criminals "do as they must," and this is the truest charity, because whilst it does not prevent correction of "immoral" conduct, it calms revengeful feelings and prevents undue punishment. As the stomach is more clamorous for food than the brain is for learning, the necessity of getting an income is with nearly all men more urgent than love of truth or virtue; multitudes of persons are compelled by this influence to do all kinds of "immoral" and "criminal" acts, and this is largely proved by the great number and variety of "crimes" they commit. Persons are not to be entirely blamed for the acts they commit under compulsion, and we cannot so heavily punish a man for his "evil" actions if we are fully convinced that he "does as he must" under all the conditions and circumstances.

All bodies whatever, men included, have only limited powers, and this is largely due to the circumstance that a body cannot possess contradictory attributes nor perform incompatible actions simultaneously; thus it cannot be both hot and cold, nor move in opposite directions at the same moment. A man cannot be alive and dead concurrently, and as we cannot perform incompatible acts, nor exert superhuman powers, we must not expect too much of each other, but make allowance for human weakness. It is evident from these and other facts that the great scientific truth, "contradictories



cannot coexist," lies at the basis of all human conduct, whether moral or physical.

As the influences within and around us are often stronger than our wishes, obedience to them is a necessary condition of life, our internal stimuli requires us to breathe, and we must either do so or die. In going through life we are as truly compelled by natural influences to move or refrain from moving as the blades of grass in a field are by the force of the wind. Ask any man why he did a particular act and he will probably say either that he does not know, that he was compelled to do it, or that he did it by his own free will. In the first case he may have been moved by an unobserved cause, in the second by an observed one, and in the third by an unnoticed one, which coincided with his volition at the moment. When a man retires from business he is usually compelled by the circulation of the blood in his body and brain to seek some other occupation. We cannot carry out our "will" to "do as we like" in any case unless our volitions happen to agree with the natural powers that govern us, and which, by supplying energy, are the real causes of our acts; we cannot by merely "willing it" fly across the Atlantic Ocean, nor even swim across the Straits of Dover, unless those powers are propitious. "Freedom of will" is like a mirage, the farther we scientifically examine it the more we find the effect to be due to ordinary natural causes. The government of the world by universal energy underlies all our arrangements, obedience to greater powers is indispensable to politics, sociology, morality and religion, it allows no distinction between men, all must submit to it; out of it arise all our systems of law and rules for maintaining life and health, and for performing all our legal, social and moral duties.

Every one of our actions, if properly interpreted, proves that we "do as we must;" thus we all must die in order that our successors may live; each man is compelled to be born, to accept his position in nature, and when he ceases to be useful he is usually forced out of sight. He is compelled to suffer pain, anxiety, poverty, ungratified desire; to be praised and blamed, punished and

rewarded; to work and wait, to love and to hate; to discover and invent, to fail and to succeed; to acquire numerous mental and bodily diseases and deformities, and numberless false ideas which he can never erase; to commit crimes, to believe untruths and promulgate them; to deceive and be deceived in nearly all directions, because whilst there is usually only one true explanation of a phenomenon, there are often many false ones, especially in the very complex phenomena of psychical research, morals and spiritualism.

Some persons seem alarmed at the numerous changes wrought by science, and ask, "Where is science leading us?" Tell us, oh, tell us, how far will science go? Farther and farther is nearly all we know. As we cannot predict as surely in morals as in mechanics, we should be reasonably content with the knowledge we possess until we can discover more, and probably when more is found, and more is understood, we then shall better see that "all is good." All things, even our ideas of morality, are changing; matter and change are inseparable, and their union and continuance are so perfect that we are practically compelled to accept them as complete.

"Everything that exists depends upon the past, prepares the future, and is related to the whole." (Oersted.) Continuity unites all natural phenomena in one great flowing scene, the present to the past and future; it is the basis of heredity, and of all history of morals and other subjects; it secures fulfillment of prediction of future events, as in eclipses, and in the discovery of substances which we have never seen, but which are subsequently obtained, as in the case of Helium, etc.

#### e. SCIENTIFIC VIEWS OF GOOD AND EVIL.

The subject of morality is very largely composed of questions relating to "good" and "evil." Scientifically defined, "good" is that which serves some useful purpose, not merely to mankind, but to the entire universe; any narrower definition than this leads to numerous contradictions which prove its falsity, and what we term "evil" is mostly that which unjustifiably produces pain, anxiety or injury to sentient creatures; a common idea of "evil" is anything

which produces pain, but this is a great mistake, because pain is simply a sensation which we fear and dislike. It is manifest that if any so-called "evil" prevents a greater one it must be good, thus the pain of amputation of a limb in order to save a life is not an evil; that which does good is good, and as the welfare of this globe and all upon it is vastly more important than that of men alone, earthquakes and volcanic outbursts are good, because they relieve the crust of the earth and prevent the occurrence of greater ones. Actions are not necessarily "evil" because they are violent or rapid, nor is the universe imperfect because all things in it are constantly changing and causing us pain and anxiety.

The belief that pain is "evil" is one of the greatest of human deceptions, nearly every person entertains it, and there is no false idea so firmly fixed or so easy to acquire; this is due to the fact that we all suffer pain, and the idea that it is "evil" has been bred in us, and taught afresh to each new generation; this false idea is, however, often useful to those who cannot realize the truthful one. That pain is not evil is shown in many ways; insensibility to it is often dangerous, because it warns us of approaching disease; thus the incipient pains of gout bid us properly regulate our diet and exercise. Pain is our great disciplinarian; if it were not for the anticipation of it we should often injure ourselves. "The burnt child shuns the fire." The painful prospect of poverty makes us thrifty; without the pains and anxieties of earning an income we should lapse into idleness, luxury and disease. The desire to escape pain and increase pleasure compels us to train ourselves, acquire knowledge, discover new truths, invent contrivances, seek new remedies, etc. As inanimate bodies undergo violent changes, and all animals suffer pain and death, why should not we? We strongly object to having more pain than we are able to bear, but even in this case we often have to submit to greater powers, as in the case of epidemics, etc. Trials are not "evils," but pain to be borne or work to be done.

"As ignorance, untruth and false beliefs are great sources of human suffering, it might be supposed that they are really 'evil,' but we know that in certain cases untruths are more useful than

truths to unlearned persons, simply because they are more easily understood; thus the idea of the existence of an evil Deity has been very useful in its time, and so has that of a heaven and hell. We pay physicians to prescribe poisons to cure our bodies, and why not pay for untruths to console our minds? Various false beliefs have been, and are, great consolations to millions of anxious persons who have never had a chance of learning the great truths of science. Untruthful orators have induced multitudes of persons to think and improve who would never have done so, and the immense 'evil' of ignorance affords a livelihood to great numbers of professional men, tradesmen and others, to supply the lack of knowledge in other persons. Anything which gratifies desire will 'sell.' If it were not for ignorant enthusiasm and exaggeration many good undertakings would not be carried out. Men are not to be blamed because they are compelled to believe untruths; probably every false belief would be found to be useful if it were scientifically investigated; nevertheless, truth is more virtuous than untruth. Not the strictest truth, but 'probability,' is the great guide of life."

If we view the subject in a comprehensive manner we find that each seeming "evil" is usually followed by a greater good; thus every man is compelled to pay rates and taxes in order to secure safety of life and property, and the greater good thus acquired more than justifies the lesser "evil" needed to produce it; each man has to suffer for all in order that he may gain the support and protection of all. Even the premature death of multitudes of human beings by disease, etc., has the good effects of regulating the density of population and the speed of human progress, each of which, if too great, would ultimately cause greater disasters to the species.

As pain and pleasure are states of the nervous system, morality is based upon physiology. The scientific basis of morality is further proved by the fact that the variety and number of pains and pleasures increase with the complexity of the animal structure and are greatest in civilized man, and if the human organism was still more complex it would be liable to a still greater variety of pains and pleasures. Good and evil, pleasure and pain, are largely equivalents of each other; thus the greater the pleasure the more usually we

have to work or pay for it. As the ideas of good and evil are extremely complex, they are largely unmeasurable and we are often obliged to guess their magnitudes.

Many persons have asked, "Why does evil exist?" The answer is: For the same reason that all phenomena exist, viz., because it is a necessary consequence of universal energy acting upon material bodies. Good and "evil" are produced by the same natural causes, and often there is no essential difference between them; thus "virtue in excess is vice," and pleasure, when too intense, becomes pain. "Evil" is due to our internal and external environments, and these are almost endless in number and variety; it is also largely due to our limited powers, especially to the smallness of our knowledge, the fewness and narrowness of our senses and the undeveloped state of our brains. There are thousands of actions occurring within and around us every instant which our senses cannot perceive, and nature is full of phenomena which we cannot explain. Each of our powers, except our intellect, is surpassed by that of some other animal; thus our vision is weaker than that of an eagle, we cannot run as fast as a greyhound, fly like a bird, or swim like a fish.

"Why has not man a microscopic eye?

For this plain reason, man is not a fly." (Pope.)

In consequence of his limited powers, each man is frequently making mistakes, neglecting the rules of health and moral conduct, injuring himself and others in many ways, resorting to deception, violence and crime in order to effect his objects, and in some cases, through despair of succeeding in life, committing suicide. The moral fall of man and woman is often caused by inability to resist the influence of environments. Nothing, perhaps, shows more plainly the limited powers of man than the multitudes of crimes he commits and the endless variety of pains, errors and deceptions to which he is subject. Not only man, but all inanimate bodies, have limited powers which frequently give rise to disasters; bodies break by their own weight, internal weakness, etc., and it is, therefore, no punishable defect in man that his abilities are not greater than they are; nevertheless, defective machines must

be strengthened and wrongdoers must be corrected in order to prevent future disasters. The more ignorant the person the more is he carried through life by the stream of events, without prediction or reaction on his part, and the more is he subject to accidents.

The problem of "evil" is extremely complex, and is "the great puzzle of mankind." Numerous moralists, theologians and metaphysicians have tried to solve it, but have largely failed, partly through deficiency of suitable scientific knowledge. The term "evil" is an extremely conventional one and very difficult to make clear, because it depends on so many conditions; thus what is "evil" to one man at one time, is often "good" to another man or at another time, or under slightly different conditions; deaths are good for the undertaker. The problem is rendered more confusing by the circumstance that each man's view differs from that of every other man, and that "evil" may be viewed in two very different aspects, viz., the ordinary narrow and deceptive one, and the broad, scientific and true one, and these two views often contradict each other. As real contradictions do not exist in nature, these must arise from the fact that the narrow view is an imperfect one. The subject is still further mystified by the fact that the whole of nature is in a continual state of change, and that our idea of "evil" is constantly changing with it.

In addition to all this, the innumerable different views taken of "evil" are so contradictory that the problem remains insoluble to nearly everybody. In such a complex case the best guide to truth is a correct theory, because it yields true inferences—to refer the question to great scientific principles and view it in the most comprehensive aspect—but even a true theory, aided by most profound meditation, is not a sufficient guide to truth in the most difficult cases, partly because the human mind is unable to attach true values to all the numerous circumstances. The only theory which is perfectly consistent with all the evidence is the scientific one, viz., that the Universe and all it contains is perfect, and that each individual body is perfect in its own sphere and circumstances at the time, but this idea seems so opposed to our experience that it is quite beyond ordinary imagination. Our view of the Universe



must not, however, be contracted to suit narrow human capacities, but be expanded so as to represent the Universe as it really is.

Each extreme view has its uses, and both are necessary, the narrow or so-called "practical" one for deciding what is best for the individual, irrespective of the welfare of others, and the broad one for general human welfare and prediction of consequences. In practical life both views should usually be taken and acted upon. Commonly, however, "self-preservation is the first rule of life," but as our automatic impulses are often stronger than our intellect, the selfish man obeys this so-called "first rule" and neglects the rights of his fellow-man. "The real first rule of life is to do the greatest good."

According to the narrow view, "there's something wrong in everything," man is full of sin and very imperfect, and the earth is "badly governed," but according to the broad one "whatever is, is good," and all things are perfect in their respective spheres and fit for future change. Things are not imperfect because they are changing; all are doing so. As no substance can possess contradictory attributes, all bodies are limited in their properties and powers and therefore cannot act otherwise than they do, and as all "do as they must," their so-called "imperfections" are only limitations. Thus an oyster is as perfect in its sphere as a man. A body is not imperfect because it is simple, nor because it is complex, nor because it has limited powers. Thus a pin is as perfect as a watch, a mouse as a man, each in its own particular station. A sleeping man is not imperfect because he is wholly guided by his automatic action, without the help of intellect. He is only a more limited being. A man must not be unreservedly blamed because he is not other than he is, nor for the crimes arising from his environments and limited faculties. These considerations do not, however, exclude the corrections necessary to progress.

"Then say not man's imperfect, Heaven's in fault,  
Say rather, man's as perfect as he ought."—*Pope*.

Each man has no choice but to take the special view of nature which his entire environments compel him; and as the influences

acting upon the brains of any two men are never entirely alike, each man's view differs, more or less, from that of every other man. The views taken by different persons vary in comprehensiveness and truthfulness directly as the extent of their knowledge of fundamental principles. The narrow-minded man is usually more convinced of the truth of his false ideas than the broad-minded man is of his true ones, largely because his ideas are fewer, simpler and more fixed. The obstinacy of ignorant persons is proverbial, and often continues until death, because their passions are frequently stronger than their intellects, and they cannot erase their false impressions.

The ideas of different men and the actions of different bodies must be either harmonious or discordant, and if discordant with each other, conflict and conversion of energy occur. It is largely in consequence of contradictory ideas that wars in general arise, and these differences are easily traceable to the influence of unlike environments, fixed ideas and limited knowledge. The rudiments of war and crimes are visible in nearly all animals. The phenomena of conflict exist throughout nature. There are "wars of the elements" as well as of men; even plants contest for a living, and all this is due to differences of property and action of material bodies. Conflicting views in politics, morals and theology are necessary parts of human life. They result in evolution, advance, growth and decay, of men and nations. We are often strengthened by conflict which we are able to bear, and trials, if rightly accepted, usually do us good.

The true and broad view of "evil" is, that whilst pain and suffering are all around us, there is no real evil. First, because its existence would prove the Universe to be imperfect; 2d, if the physical constitution of the Universe is perfect, as scientific evidence declares it to be, the moral arrangement, being inseparable from it, must also be perfect; 3d, whenever a case of seeming evil is fully investigated, it is ultimately proved to be necessary and good; 4th, it has been abundantly proved that pain is necessary to human existence and welfare in many ways; 5th, as great "calamities" serve useful purposes and many so-called "evils"

prevent greater ones, they must be good; 6th, "evil" acts are produced by natural agents in the same manner as good ones; 7th, the greatest "evil doers" are compelled to act, the same as all other persons and all inanimate substances; 8th, it would be inconsistent if all other animals suffered pain whilst man alone was exempt; 9th, even the feeling of so-called "evil" is limited to an extremely minute portion of nature, viz., animal brain in the waking state, and in that only occasionally; 10th, no consistent theory of human life has ever been framed upon the idea that real evil exists; 11th, the Universe works so as to secure the greatest good to all things; and 12th, belief in the existence of "evil" is easily accounted for by our frequent experience of pain. Considering all this evidence it is incomparably less likely that the moral perfection of the Universe is defective, than that we with our very feeble minds and fixed belief in the existence of "evil," are deceived in such a vast and complex question.

It may be objected that if such a belief was not a true one, it would not exist in nearly every human mind and be irremovable; but we know that some of the greatest errors have been believed by nearly all men during many centuries, until expelled by science; e. g., that of the rotation of the sun round the earth. The question might also be asked: What is the use of the conclusion that the Universe is perfect if it cannot be at once applied to relieve human suffering? The answer is: It has been and can be so applied by intelligent persons who possess suitable and sufficient scientific knowledge. The advantages of scientific morality are immediately applicable, but whether they can be fully realized at once is a minor question. Great ideas require time to grow, and to obtain oaks we must plant acorns many years in advance.

The coming system of morality is a much more reliable one than any at present existing, because it is entirely founded upon truths which have been proved by means of proper and sufficient evidence. "Truthfulness is the basis of all the virtues." When men have true principles to guide them they agree, because their leading ideas are the same. The reliability of science depends largely upon the fact that the testimony of inanimate substances

and impersonal powers is free from bias; we cannot alter a fact; it is a fact forever. Uncertainty means danger and truthful ideas are essential to the highest morality.

To believe from sufficient proofs that the Universe is perfect, that real evil does not exist, and that all men "do as they must," affords relief of mind in many trials and constitutes a sound basis for the much-desired "government by love." It diminishes hatred of our fellow-men and requires us to forgive our enemies, but it does not relieve us of the duties of discovering truth or of improving ourselves and others. The greatest preventive of pain is knowledge; new knowledge is the starting point of human progress and the most powerful cause of national advance is the general diffusion of comprehensive scientific discoveries. Fundamental scientific knowledge is the greatest promoter of peace; it enables us to correct error and detect deceit; it makes life more worth living, and that it prolongs life is shown by the fact that scientific philosophers live longer than the average period. Scientific experience makes us more exact, careful and reliable, and by increasing our knowledge of the future enables us to arrange beforehand so as to secure our safety and correctness of conduct. The great uses of science in preventing, alleviating and removing bodily pain, transmitting intelligence, etc., are well known. But notwithstanding all this and very much more, it is often called cold, dreary, etc., by emotional persons, because it does not encourage irrational beliefs and desires.

The idea of universal goodness is an old one, and was originally a mere conjecture, but it is now abundantly supported by facts, and mankind will be gradually compelled by the pressure of advancing knowledge to accept it. At present it needs competent exponents, and it is merely our lack of suitable scientific knowledge and our frequent experience of pain that hinder our believing it. Like other great truths which mankind have been slowly compelled to accept, it is strongly at variance with our feelings whilst perfectly in harmony with intellect.

If the foregoing system of morality were taught in schools it would produce intelligent, practical and moral human beings, each

one acting as a law unto himself, and would ultimately result in evolving a more truthful system of religion than any at present existing.

BIRMINGHAM, ENGLAND.

G. GORE.

[Among those scientists of England who take an interest in the relation of science to ethics, George Gore, F. R. S., LL. D., of Birmingham, holds a prominent position, and the present paper contains, in a condensed form, the maturest thought of his long and useful life.

Dr. Gore was born of humble parents in Bristol, England, January 22, 1826. His education was scanty and he had to work hard for a living. He left school at thirteen and found employment four years as an errand boy and then four other years as a cooper. Although he had received no scientific training, attended no scientific lectures, did not enjoy access to any laboratory, had no scientific friends, and was not possessed of inherited property, he showed even in his boyhood a love of, and an aptitude for, experiment, and, being fond of science, he was always an eager reader of scientific books. At an age of 26 years, having acquired, by mere self-training, a stock of scientific knowledge, he formed classes for teaching science. In the year 1855 he discovered "explosive antimony," and was soon afterward appointed lecturer on physics and chemistry at the great Grammar School of King Edward VI. at Birmingham, a position which he filled for many years. He made numerous experimental researches for philosophical purposes, which, on account of their originality, etc., were published by the Royal Society, the Birmingham Philosophical Society, the Philosophical Magazine, etc. We count over 200 scientific essays written by him, and most of his researches were of a laborious character; among them was one made with liquified carbonic acid, and one with the most dangerous anhydrous hydrofluoric acid. He discovered the molecular movements of red-hot iron, electrolytic musical sounds, and the electric rotating ball, now used in many lecture rooms.

Dr. Gore's specialty is electro-metallurgy, and in his capacity of consulting chemist and electro-metallurgist he made various useful inventions which proved helpful to the industries of England. He wrote four books on electro-metallurgy, one of which, *The Art of Electro-Metallurgy*, has passed through five editions; another, *The Electrolytic Refining of Metals*, has been used for many years as a text-book in industrial schools.

Although Dr. Gore is a specialist and even a pathfinder in his chosen field, he takes a great interest in the general significance of science and especially its practical application in the common walks of life. His appreciation of the essential value of scientific research is expressed in two books, entitled *The Art of Scientific Discovery* and *The Scientific Basis of National Progress*. His conception of the fundamental scientific nature of morality found expression in a voluminous work, *The Scientific Basis of Morality*.

There is a very laudable method in England of recognizing the merits of citizens who have well deserved the approbation of their country. It consists of a Civil List pension, and this distinction was conferred upon Dr. George Gore by Queen Victoria.—EDITOR.]

## THE PRINCIPLE OF THE CONSERVATION OF ENERGY.

FROM THE POINT OF VIEW OF MACH'S PHENOMENOLOGICAL  
CONCEPTION OF NATURE.

THE need of an epistemological investigation of the domain of the exact sciences, which has recently been making itself very vividly felt, like similar aspirations of universal and wide-reaching import, has found expression in many varied forms. Leaving out of account the original fundamental ideas of the great inquirers, which afford at all points *aperçus* of epistemological inquiries, the real era of the development in question began with Faraday, Lord Kelvin and Maxwell—although it was not consciously pursued until the present day, when a number of prominent inquirers began to investigate epistemologically the foundations of the exact sciences, not as a matter of supererogation, but as a definite end, sufficient in itself.

In two branches of knowledge which stand in intimate relation with physics, this work had been attempted at a much earlier date; namely, in philosophy and mathematics. In the first field, Berkeley, Hume and Kant had subjected the theory of knowledge to thoroughgoing scrutiny and criticism, and in so doing had at least demonstrated the necessity of such investigations. A critical examination of the foundations of mathematics by Abel, and by Weierstrass and his school, had proved amply that successful progress in the domain of mathematics was by no means a conclusive demonstration of the solidity of its foundations. It follows at once from the results of these inquiries that a critical examination of the epistemological structure of physics likewise is an imperative necessity, and has in



no sense been rendered redundant by the steady progress made in this science.

#### MACH'S EPISTEMOLOGICAL WORK.

Ernest Mach was undoubtedly the first inquirer to discern clearly the necessity of a reform of the current conceptions of the fundamental principles of physics and to make the epistemological investigation of these notions an independent object of inquiry. For forty years now, in the prosecution of this task, he has produced an imposing array of works and memoirs. For a long time he remained isolated, and, as he himself tells us, for many years the only reception his ideas met with from his colleagues was a shrug of the shoulders. But gradually the number of those who either partly or wholly agreed with his views increased; nay! he was ultimately successful, even, in discovering kindred ideas among inquirers of an earlier period; principally, B. Stallo, a German-American whose *Concepts and Theories of Modern Physics* appeared in 1881 and who in very many points, at times even in minute details, is in surprising accord with Mach; and the celebrated English mathematician Clifford (died 1879 in Madeira), who took a related, if not an identical, point of view with that of Mach.<sup>1</sup>

Mach found substantial support for his views also in the philosophical school of Avenarius, while more recent thinkers, like H. Cornelius in Munich, exhibit even greater affinities. In England, again, Karl Pearson has expressed his full agreement with Mach's views on the epistemological foundations of physical science in his book *The Grammar of Science*, the first edition of which appeared in 1892, and the second enlarged edition in 1900.

#### POSTULATES, HYPOTHESES, AXIOMS AND NATURAL LAWS.

The discussions on this subject have of late centered chiefly about the definitions of such conceptions as "axioms," "postulates," "hypotheses" and "natural laws," the endeavor being to formulate

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<sup>1</sup>Goethe and Julius Robert Mayer had given expression to views of a similar character. So also had Adam Smith.

precisely the functions which these traditional conceptions of physics fulfill, and to what extent they are permissible and serviceable.

It is of importance to understand in the first place that the notion of "axioms" is an entirely superfluous one. Grassmann demonstrated this assertion with regard to the formal sciences as early as 1844 in his *Ausdehnungslehre*, a book which is collaterally of great philosophical importance. At the head of arithmetic, he argues, may be placed, instead of the customary *axioms*, the following two simple *definitions*:

1. Any two numbers are said to be equal numbers, when, in a given calculation, one of them can be substituted for the other.
2. A quantity is said to be greater than another quantity when the latter is representable as a part of the former.

From these definitions may be deduced logically the principle (frequently cited as an axiom in the same connection), that "like changes performed on like quantities give like results."

Similarly the axioms of logic may be expressed in the form of definitions. The principle of identity is correctly expressed by asserting that "a is always a," and furnishes a definition of the concept of substance; the principle of contradiction is, according to the varying form which we give to it, either equivalent with the first principle or it contains a definition of negation.

Now, coming to physics, the highest and most general principles of this science likewise contain definitions, but their contents are not fully exhausted by these definitions; they are not pure definitions, but are characterized by the so-called principle of "particular determination" propounded by L. Lange and accepted by Mach.<sup>1</sup>

Thus, for example, before the law of inertia can be made to have a meaning we are in need of a system of co-ordinates and a scale of time. For establishing this principle we are in need of several bodies, which the law of inertia, as a result of the definitions, must hold valid.

This is most easily seen in the case of time. The concept "uniform" must first be defined. For this purpose may be chosen a body,

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<sup>1</sup>See *The Science of Mechanics*, Chicago, 1902, 2d edition, page 544.

moving with respect to a given system of co-ordinates, the displacements of which body are considered as the measures of time. That motion, then, of a second body is called "uniform" of which the positional displacements are proportional to the displacements of the body of reference. Such a body of reference, for example, is the rotating earth, and the motion of a body is said to be "uniform" when the displacements which it undergoes between the same points of it are proportional to the angle of hours reckoned from the vernal equinox. Absolutely, there is no assignable meaning in speaking of a uniform motion *per se*. The law of inertia has, consequently, with reference to any second new body, the significance of a natural law. It makes with respect to that body an assertion which can be demonstrated experimentally.

Recapitulating, then, we may say that the law of inertia, and, analogously also, the other so-called "axioms" or "postulates," have only a *partial* definitional value, in that, first, they define certain conceptions, but in that, secondly, their contents are not entirely exhausted with the formulation of these definitions; nay, that, on the contrary, inasmuch as the law asserts the universal applicability of these concepts, it employs assertions, of which the actuality may be controlled by experiment. Principles of this character have, therefore, a validity which stands in part only the test of experience (that is, they may not always be borne out by experience), which isolated exceptions it may be possible to harmonize with the principles by the subsequent construction of new and other principles of a more special character. The only genuine test of the value of principles of this sort is the possibility or impossibility of deducing from them a system, or, in better phraseology, of erecting a system on the foundations which they furnish.

Consequently, the decision with regard to the value of the highest and most general principles of physics rests primarily with the outcome of repeatedly continued experimental tests which directly confirm or refute the truth of the more specific principles. The general principles are demonstrated to be serviceable implements of science when the special principles confirmed by experience permit of their being arranged, along with the former, into a single system

in which the so-called "postulates" possess the most comprehensive and most general significance.

From this state of matters the conclusion follows immediately that the difference between "postulates" and "natural laws" is a graduated one only. For, that the latter likewise possesses axiomatic, or, as we might more correctly say, definitional, significance, is upon the face of it obvious, though the statement may be enhanced in lucidity by the consideration of its special application to Coulomb's law. Writing this law in the form

$$f = \frac{M_1 M_2}{r^2}$$

where  $f$  represents the magnitude of the force  $M_1 M_2$  the numbers measuring the masses, and  $r$  the number measuring the distance, by which assertion (on the mere assumption that it is possible to produce equal masses) the unit of mass, but not multiples of that unit, are defined, it will be apparent that it is impossible to determine the numbers which are the measures of these masses by the consideration of two masses only, for the reason that a product can be separated into two factors in different ways. Three masses may be combined in three ways, and hence permit of being uniquely determined from the three equations so obtained; in other words, the law is just sufficient for the definition of the masses of three bodies. The experimental verification of the proportionality of force to product of masses is still impossible so long as we have three bodies only; for these bodies the existence of the law is given by the definition of the three masses. Not until four masses are presented does the law afford an assertion that can be experimentally verified; for these four bodies may be combined in six ways, giving six equations, of which four are employed for determining the unknown quantities  $M_1, M_2, M_3, M_4$ , and of which the other two may be employed in the verification of the law by experience.

#### THE PRINCIPLE OF THE CONSERVATION OF ENERGY.

Many and numerous as are the applications which the principle of the conservation of energy has found in all provinces of

physics; great as its import for science in general has become, nevertheless the conceptions of physicists regarding the theoretical nature of this principle are so far apart and discordant that, as Mach says, "opinions regarding the foundations of the law of energy still diverge greatly even at this late day." Similarly variant are the views regarding the position which this principle occupies in theoretical physics. One school of physicists regards it as the highest and the exclusive law of physics, ascribing to it an almost axiomatic import, whilst other inquirers—to mention only Mach, Hertz and Boltzman—have believed themselves called upon to take a most decisive stand against exaggerations of the scope of this principle. Indeed, so far has the conceptual investigation of this principle been neglected that to-day even the form of enunciation in which it appears in most text-books can lay little claim to precision, let alone to correctness. Considered rigorously and unprejudicedly, therefore, the principle of the conservation of energy is wrongly formulated; at least, to express it in Mach's words, "there are limits beyond which the principle can be only artificially maintained."

Nevertheless, it is difficult to define these limits with anything like precision. The fact is that the principle is in contradiction with the second fundamental law of the mechanical theory of heat, and this contradiction must be removed if the logical harshness of the formulation of the principle is to be removed. But the source of the contradiction in question can be found nowhere else than in the concept of energy itself, from which all our assertions are predicated. In point of fact the elucidations of the first inquirers in this field, for instance, the works of Clausius, do not contain this contradiction; but, then, the term "energy" does not as yet appear in them.

What now is "energy?" It is certainly not a substance; certainly not a substantial or real property inherent in a body, as is erroneously believed in many quarters. It is a concept formed, like all other physical concepts, on the basis of definite given facts, though not ceasing on this ground to be an arbitrary creation of our intellect. And in point of reality the concept of "energy" has been so formed and selected that it shall supply fully the needs of the principle of "energy."

The facts upon which its formation rests are the following: In the domain of mechanics exists a large number of motions of which the property of reversibility is a characteristic feature, just as in the cycle of Carnot. When, for example, a body falls a certain distance, it can be made to rise again the same distance by simply reversing the direction of its velocity. This peculiarity of the phenomenon of motion was conceived as a *capacity* of the body, and was designated "its living force." Inasmuch as the body has at every point of its path "the power" to evoke another like motion, differing in direction only, inquirers were led to speak of the constancy of living force, always positive because direction was not regarded. Hence resulted the principle of the "conservation of living forces," the applicability of which is strictly limited to reversible processes of the kind described.

In the case of friction, which is a non-reversible process, the principle does not hold—a conclusion which is mathematically expressed by saying that the principle loses its validity as soon as forces appear which are dependent on velocity. But since, in such cases, a body loses living force, it was an obnoxious suggestion to regard the heat which made its appearance as the *equivalent* of that force.

The word "equivalent" must not be misunderstood. Heat is not a real "equivalent," for the reason that it is impossible to reverse the process, and because also the process can take place only in one direction. Nevertheless, it is possible to conceive this heat as a partial summand of the total energy of the body and to add it to energy of some other kind. Again, it must not be forgotten that this heat, or this part of the energy of the body, represents no capacity whatever to perform work, but has simply the significance that it can, and actually does, become the equivalent of work when a transformation of heat into work takes place. This condition can under no circumstance be left out of consideration (as has hitherto been the custom in defining energy), for the reason that there is absolutely no necessity that the said transformation should be possible. Consequently, the principle of the conservation of energy simply informs us, when a transformation of energy takes place, what the ratio is in which that transformation is accomplished.



It may be remarked further, that the truth of the principle of energy assumes that the manner of measuring homologous quantities is the same in the different departments of physics. As a matter of fact, the modes of measuring quantities of heat and electrical work are homologous with the modes of measuring mechanical work. But this would not be the case were not the potential, or the difference of level, of the electrical states of two bodies measured by units of mechanical work—for which state of things there is no real logical necessity. Otherwise the law of energy would not be applicable to electrical phenomenon, and, in place of simple proportionality, which can be transformed into equality by the simple choice of an appropriate unit of measure, would be substituted a more complicated function.

The stability of the law of energy is thus essentially dependent on our arbitrarily selected definitions of the fundamental concepts of physics; the possibility of its existence is dependent on the presence of an equation between the different groups of physical concepts of measurement.

A genuine law of nature, in the sense usually supposed, this principle is not, even though certain actual facts are at the basis of the assumption of its validity.

Ordinarily we think, when we hear the law of the conservation of energy—not so much of energy in the sense above described as of energy in the sense of *capacity to perform work*—which, as we have seen from what has gone before, are two distinctly different things. But if in the place of energy we take as the essence of our principle capacity to do work, then this principle assumes an entirely different form. In this last case nothing more can be generally affirmed than that the capacity to do work has remained constant, when the passage from the first to the second state as well as from the second to the first is *possible*, or, when, as we say, we are concerned with a reversible cycle.

The principle of the constancy of capacity to do work is *thus restricted to cyclic processes*, and is none other than Clausius' principle of the equivalence of transformation, which is one of the forms of the second law of the mechanical theory of heat.

Processes which are not reversible, as, for example, friction, or the passage of heat from higher to lower temperatures, result in the *dissipation* of capacity to do work. Since, in considering the principle of energy, it has been customary to adhere rigidly to this last-mentioned meaning of the word, it will be apparent that the principle of the conservation of energy, as thus formulated, was incorrect, and we now know also what the limits mentioned by Mach are, "beyond which this principle lost its validity."

It will at the same time be apparent that this second principle is a more appropriate expression of a characteristic peculiarity of our nature than is the second—which furnishes us merely with an equation between our own concepts. The reason for this is that the second principle is more intimately associated with the phenomena of nature and is not so much concerned with the properties of bodies as they are assumed to be by us.

The results of the foregoing inquiry are, then, the following:

1. The principle of the conservation of energy is in its present form incorrect.

2. A distinction must be made between "energy" and "capacity to do work."

3. Whether the first or the second concept is embodied in the principle mentioned, are obtained in its place two laws; namely, the first and the second laws of the mechanical theory of heat.

Furthermore, and finally, the special importance of reversible cyclic processes in all the departments of physics is made apparent. Thus, without a consideration of the concept of reversible processes, it would appear to be utterly unfeasible to attempt a formulation of the principle of energy, and on the grounds which have been adduced the introduction of the two first laws of the theory of heat into instruction in physics in secondary schools would appear to present no objections.

HANS KLEINPETER.

GMUNDEN, AUSTRIA.

## MADAME BLAVATSKY.

### I.

THE grand discovery of the nineteenth century is the absolute unity and immutability of Nature's laws. It would seem that this would be the death blow to superstitions of all kinds, particularly of magic arts, etc. But such is not the case. Astrology, chiromancy, theosophy and the occult sciences "occupy a large place in modern thought, literature and polite society on both sides of the Atlantic.

The tendency to cultivate the esoteric manifests itself in the study of the Cabala, the investigation of the mysteries of Buddhism, Confucianism and other oriental philosophies, in researches into the phenomena of spiritualism, so called, and in the foundation of societies to study psychic force and the tenets of the followers of Madame Blavatsky; crystal-gazing, reading in magic mirrors, slate-writing, planchette, the quasi-scientific study of apparitions, of table-turning, of rappings by unseen powers, of telepathy, of the subliminal self, etc. Look, for example, at the advertising columns of the *New York Herald*, and read the long list of clairvoyants, magic healers, magnetizers, palmists, astrologers, and spirit mediums.

The remarkable revival of occult arts in this age of ours is a source of wonder to scientific men. The reason is not difficult to divine. It is a reaction against the rampant materialism of the times. Extremes meet. The pendulum swings as far forward as backward.

Science declares the age of miracles and magic is passed. In one sense this is true. But says Thomas Carlyle: "This world, after all our science and sciences, is still a miracle; wonderful, inscrutable,

*magical* and more, to whosoever will think of it. That great mystery of Time, were there no other; the illimitable, silent, never-resting thing called Time, rolling, rushing on swift, silent, like an all-embracing ocean-tide, on which we and all the universe swim like exhalations, like apparitions which *are*, and then *are not*; this is forever very literally a miracle; a thing to strike us dumb."

The materialism of the age seeks to crush out the strivings of the soul after the divine life, to deny God and immortality. The psychic in man is but an epiphenomenon, the result of the "fortuitous collocation of atoms"—dissipated at death. The Cosmos is directed by a blind, insensate Force.

"A moment's Halt—a momentary taste  
Of BEING from the Well amid the Waste—  
And Lo!—the phantom caravan has reacht  
The NOTHING it set out from—oh, make haste."

Crushed by such negations, tender souls take refuge either in the dogmatisms of historical religious creeds, in liberal Christianity as exemplified by Unitarianism, or else in the various forms of mysticism in vogue to-day: Spiritism, Christian science, Theosophy, etc., etc. There are also many students of philosophy, not attached to any particular religious faith, or school of occultism, who take a spiritualistic conception of the cosmos and man.

Many noted men have been numbered among this latter body of idealistic thinkers. They argue as follows with great cogency: "It is not conceivable that, if only matter existed, it could, by any effort of its inherent forces, produce Reason, Intelligence, Thought, or even that limited Reason which we call Instinct. Nothing can by exercise or operation of the forces which belong to it create qualities of a higher nature than itself possesses. The effect cannot be of a higher nature than the cause, or derive from it qualities higher than any which it possesses, or radically different from them. Only Intelligence, or something higher than Intelligence, could produce the human intellect or the animal instinct. To that Intelligence must be ascribed everything that displays design in the universe."

The learned scientist, Joseph Le Conte, in his *Evolution and Religious Thought*, has written as follows, on the proof of personality behind Nature: "If the brain of a living, thinking man were exposed to the scrutiny of an outside observer with absolutely perfect senses, all that he would or could possibly see would be molecular motions, physical and chemical. But the subject himself, the thinking, self-conscious spirit, would experience and observe by introspection only consciousness, thought, emotions, etc. On the *outside*, only physical phenomena; on the *inside*, only psychical phenomena. Now, *must not the same be necessarily true of Nature also?* Viewed from the outside of the scientific observer, nothing is seen, nothing can be seen, there is nothing else to be seen, but motions, material phenomena; but behind these, on the other side, on the *inside*, must not there be in this case also psychical phenomena, consciousness, thought, will; in a word, *personality?* In the only place where we do get behind physical phenomena, viz., in the brain, we find psychical phenomena. Are we not justified, then, in concluding that in all cases the psychical lies behind the physical? . . . Thus then we see that our self-conscious personality behind brain phenomena compels us to accept consciousness, will, thought, personality behind nature."

"The star-lit sky above, the law within—  
 These are of truth the witnesses sublime,  
 To which man's heart has hearkened in all time,  
 As to deep voice heard 'mid the battle's din.  
 Beneath the stars, in presence of the soul  
 Far from the whirl, the noise, the strife, the glare  
 Of the vain world, come visions of the whole,  
 Which His eternal hands make and upbear;  
 We read the writing of the mystic scroll,  
 And know that life means hope, and not despair."

"God geometrizes," says the profound Plato. The heavens are crystalized mathematics. Where there is mathematics there is evidence of design, of mind. Writes the great French astronomer, Camille Flammarion: "The existence of God is incontestable, for without it, it would be impossible to explain the existence of in-

telligence in the creation of mathematics (which man has not invented but discovered), of intellectual and moral truth. . . . God, then, is a pure Spirit or rather *the* pure Spirit, self-conscious and conscious of each infinitesimal part of the entire universe, personal but without form, infinite and eternal."

Granting the existence of "an eternal and infinite spirit, the intellectual organizer of the mathematical laws which the physical forces obey," and conceiving ourselves as individualized points of life in that greater life, for "in God we live, move, and have our being," spiritual thinkers declare that we bear within us the undying spark of divinity and immortality.

Says Le Conte: "Without immortality there would be no conceivable meaning in human life, nor, indeed, in the complex structure and elaborate evolution of the Cosmos itself. Every evolution must, by definition, have an end. Every cycle of material changes must finally close. Now suppose the human race, or, indeed, the Cosmos itself, to have run its course, as it inevitably must finally. When all is done and the cycle closed—what then? Evidently without immortality it would be exactly as if it had never been at all. The whole elaborate history of the Cosmos and of the organic kingdom, occupying inconceivable time and culminating in man, would be but an idle dream, an idiot tale, signifying—nothing! Can we by reason accept a conclusion which is a stultification of reason? Now the belief in God and immortality is not only universal—unless destroyed by a shallow scientific philosophy—but was at all times, is now, and ever will be, a necessary condition of human improvement. Without it man would never have emerged out of animality into humanity, or, having thus emerged, would never have risen above the lowest possible stages. It is simply inconceivable that what has ever been the necessary condition of human progress should have no foundation in the laws of nature, should have no objective reality corresponding thereto."

Or take the following statement:

"The Universe is the body of God;  
Humanity is the soul of God;  
God Himself is the spirit of God."



"From this we recognize the truth of the opinion of the Pantheists, who declared that God was the universe; but we also see their error, when they refuse to acknowledge in him any innate consciousness. For as the consciousness of man is independent of the millions of cells which compose his body, so the consciousness of God is independent of the molecules of the universe and of man which form its body and its soul. We might partly destroy the universe without in any way diminishing the Divine Personality, even as the four limbs can be cut off a man without his losing the consciousness of the integrity of his personality. This is why the conclusions of Schopenhauer and Hartmann are partly erroneous. . . . God is the Absolute, the essence of which is impenetrable, formed of the universe as body, of humanity as soul, and of himself as spirit."

Strong minds may hold a rational belief in Theism and immortality, based upon the conclusions of the sanest thinkers of the idealistic school, tempered and restrained by science, like Martineau, Le Conte and John Fiske, without committing excesses in metaphysics, but weak minds with a mystical trend are prone to fall victims to the psychical epidemics of the age, and to follow blindly such leaders as Mary Baker Eddy, Dowie, Blavatsky, and the like.

Of all the occult movements which have affected modern thought, theosophy is the most interesting to the student. Theosophy is on a higher metaphysical plane than spiritualism, and has drawn upon the Orient for its inspiration. We look to the East for light, but when it comes to mental illumination, we find, alas, much that is *dark*! Yes, from out of the mysterious East have proceeded most of the superstitions that have hypnotized the minds of the Western thinkers. It is the land of wonders and paradoxes. Hand

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<sup>1</sup>Even Nomothetism, which abandons the idea that God is a being, a person, or an individual of any kind, but characterises him as the super-personal presence of the Eternal that shapes and creates the world, manifesting himself in natural laws, does not brook materialism, nor denies the spirituality that prevades the Cosmos. Dr. Paul Carus may, in the opinion of supporters of the traditional belief in God, go to the verge of Atheism, but he recognizes the significance of facts spiritual and the indispensableness of the idea of immortality.

in hand with the most grotesque idol worship is a metaphysics of remarkable subtlety. It is the land of contrasts. A renaissance in the East, says a well-known writer, means a new religion; a renaissance in the West signifies the death of a religion and the growth of positive knowledge. 'Tis well said! The Orient is immersed in a dream; the Occident is awake and acting. The East is well symbolized by a gigantic sphinx, half buried in shifting sand, brooding upon the problem of existence and dreaming the eternal dream of spirit. To escape repeated transmigration; to become one with Brahma, ah! that is the supreme desire of the Eastern sage.

The modern theosophical movement is chiefly to be studied in the career of a single individual—Madame Helena Petrovna Blavatsky, a Russian by birth, who was the founder of the Theosophical Society. Dr. Elliot Coues has called her "the she-Cagliostro of the 19th Century." In the past centuries, the greatest charlatans have been men, for example, Alexander of Abonitichos, Apollonius of Tyana, Comte de St. Germain, Mesmer and Cagliostro; but *place aux dames*, the wheel is bound to turn. This nineteenth century being the age of woman's rights, it is only natural that the greatest charlatan should be a woman—and such a woman: big, fat, frowsy, and gross-looking, a tremendous smoker of cigarettes; possessed of a horrible temper and a vocabulary of words not to be found in works on etiquette, but withal a female of extraordinary mental acumen and personal magnetism, who had the honor of introducing a religious cult to the Western world—a cult that now numbers its adherents by the thousands.

Let us turn aside at this juncture to ask, "What is Theosophy?" The word Theosophy (Theo-sophia—divine knowledge) appears to have been used about the third century, A. D., by the Neo-Platonists, or Gnostics of Alexandria, but the great principles of the doctrine, however, were taught hundreds of years prior to the mystical school established at Alexandria. "It is not," says an interesting writer on the subject, "an outgrowth of Buddhism, although many Buddhists see in its doctrines the reflection of Buddha. It proposes to give its followers the esoteric, or inner-spiritual meaning of the great religious teachers of the world. It asserts repeated reincarna-

tions, or rebirths of the soul on earth, until it is fully purged of evil, and becomes fit to be absorbed into Deity whence it came, gaining thereby Nirvana, or unconsciousness." Some theosophists claim that Nirvana is not a state of unconsciousness, but just the converse, a state of the most intensified consciousness, during which the soul remembers all of its previous incarnations.

I shall now introduce Madame Blavatsky to the reader, through the medium of Colonel Olcott, whose striking pen picture of her is worthy of record.

## II.

In the year 1874 Colonel Henry S. Olcott, a special correspondent of the *New York Graphic*, was sent to investigate the alleged spiritistic phenomena occurring in the Eddy family of Chittenden, Vt. The place where the ghosts were materialized was a large apartment over the dining-room of the antiquated homestead. A dark closet, with a rough blanket hung in front of it, was the cabinet. From this cabinet the shades of the departed came forth to hold converse with the awe-struck sitters, who had come from far and near to witness the phenomena. Olcott not only saw the ghosts, but he met his fate in the shape of a Russian occultist, who came to the place to acquaint herself with the methods of American spiritualists. But let me quote the journalist's own words:

"My eye was first attracted by a scarlet Garibaldian skirt the former wore, as being in vivid contrast with the dull colors around. Her hair was then a thick blond mop, worn shorter than the shoulders, and it stood out from her head, silken, soft, and crinkled to the roots, like the fleece of a Cotswold ewe. This and the red skirt were what struck my attention before I took in the picture of her features. It was a massive Kalmuck face, contrasting in its suggestion of power, culture and imperiousness, as strangely with the commonplace visages about the room as her red garment did with the gray and white tones of the wall and woodwork, and the dull costumes of the rest of the guests."

Colonel Olcott scraped an acquaintance with this eccentric character. She informed him that she was Madame Hélène Petrovna

Hahn-Hahn Blavatsky, a Russian lady of distinction, a believer in spiritism and a student of occultism, who had traveled in Egypt and India, searching for "antiquities at the base of the pyramids, witnessing the mysteries of Hindoo temples, and pushing with an armed escort far into the interior of Africa."

She discoursed learnedly of the "astral plane," of French and English spiritism, and fascinated Olcott with reminiscences of foreign travel. Little did he imagine at the moment that she was to develop into the greatest pythoness of the age, the introducer into the Occident of a new religious cult, the modern priestess of Isis; and that he, the prosaic newspaper reporter, would evolve into her coadjutor and Grand Hierophant of the Mysteries, the greatest and most ardent exponent of her so-called system of occultism and magic.

No sooner had Madame Blavatsky arrived than spirits from Russia, the Caucasus, India and Egypt materialized in the Eddy ghost cabinet. The *mise-en-scène* changed to an Oriental and barbaric background, in honor of the great progenitor of modern theosophy. Among other things that took place was "the writing of Madame Blavatsky's name upon a card, by a spirit hand, in *Russian script*."

"But," says Colonel Olcott, "I doubt if any circle ever witnessed a more astonishing spiritual feat than that which I am about to relate.

"The evening of October 24 (1874) was as bright as day with the light of the moon, and, while there was a good deal of moisture in the air, the atmospheric conditions would, I suppose, have been regarded as favorable for manifestations. In the dark-circle, as soon as the light was extinguished, 'George Dix' (a spirit control of the Eddy brothers), addressing Madame de Blavatsky, said: 'Madame, I am now about to give you a test of the genuineness of the manifestations in this circle, which I think will satisfy not only you, but a skeptical world besides. I shall place in your hands the buckle of a medal of honor worn in life by your brave father, and buried with his body in Russia. This has been brought to you by your uncle, whom you have seen materialized this evening.' Presently I heard

the lady utter an exclamation, and, a light being struck, we all saw Madame de B. holding in her hand a silver buckle of a most curious shape, which she regarded with speechless wonder.

"When she recovered herself a little she announced that this buckle had, indeed, been worn by her father, with many other decorations, that she identified this particular article by the fact that the point of the pin had been carelessly broken off by herself many years ago; and that, according to universal custom, this, with all his other medals and crosses, must have been buried with her father's body. The medal to which this buckle belongs was one granted by the late Czar to his officers after the Turkish campaign of 1828. The medals were distributed at Bucharest, and a number of the officers had buckles similar to this made by the rude silversmiths of that city. Her father died July 15, 1873, and she, being in this country, could not attend his obsequies. As to the authenticity of this present, so mysteriously received, she possessed ample proof, in a photographic copy of her father's oil portrait, in which this very buckle appears, attached to its own ribbon and medal.

. . . "Was there ever a 'manifestation' more wonderful than this? A token dug by unknown means from her father's grave and laid in his daughter's hand, five thousand miles away, across an ocean! A jewel from the breast of a warrior sleeping his last sleep in Russian ground, sparkling in the candlelight in a gloomy apartment of a Vermont farmhouse!" (*People from the Other World*, Hartford, Conn., 1875, pp. 355-359.)

And now for a brief sketch of the High Priestess of Isis:

Madame Blavatsky was born in Ekaterinoslav, Russia, in 1831. She was the daughter of Colonel Peter Hahn, of the Russian army, and granddaughter of General Alexis Hahn von Rallenstern Hahn (a noble family of Mecklenberg, settled in Russia). Her mother was Hélène Fadeef, daughter of Andrew Fadeef and the Princess Dolgouriki. At the age of seventeen she married Nicephore Blavatsky, a councilor of state, whom she was pleased to call "the plumed raven." He was old and gouty, being forty-three years her senior. The marriage was not a happy one, and the couple separated by mutual consent at the expiration of three months. Madame

Blavatsky then commenced her extraordinary career as a thaumaturgist. Sinnett, author of certain works on occultism, wrote a biography of the Russian adventuress, but it is so replete with Munchausen stories that little credence can be given to it. In India she was accused of being a spy in the pay of the Russian government, and regarded with suspicion by the English authorities. In the year 1870 she visited Egypt in company with a certain Countess K——, always consorting with mediums, magnetizers and clairvoyants. At Cairo she endeavored to form a spiritistic society, but without much success. Her biographer relates that she spent one night in the King's Sepulcher in the bowels of the Great Pyramid of Gizeh, reposing in the very sarcophagus that once held the mummy of Pharaoh. In one of her books she claims that it is absurd to imagine, as do modern archæologists, that the lidless coffer in the Great Pyramid was ever a receptacle for a mummy. Rather was it the place for lustration, or baptism, of the neophyte in the ancient Egyptian Mysteries.

It is said that the police of Cairo asked her to "move on," and that she departed in hot haste from Egypt. Several times she turned up in Russia after her Eastern sojourns, once at a gloomy chateau in Tiflis, the residence of a relative, Prince ——, where she gave séances during the long winter evenings. Then she came to the United States, from which time dates the theosophical epidemic.

Madame Blavatsky claimed that "there exists in Thibet a brotherhood whose members have acquired a power over nature which enables them to perform wonders beyond the reach of ordinary man. She declared herself to be a chela, or disciple of these adepts and mahatmas, and asserted they took a special interest in all initiates in occult lore, being able to cause apparitions of themselves in places where their bodies were not, and that they not only appeared but communicated intelligently with those whom they thus visited; and themselves perceived what was going on where their phantoms appeared." This phantasmal appearance she called the projection of the astral form. The Madame did not claim to be the founder of a new religious faith, but simply the reviver of a creed that has slumbered in the Orient for centuries, and declared



herself to be the messenger of the mahatmas to the scoffing world.

Theosophy would have amounted to little had it not been for the fact that it was exploited by the Theosophical Society, an organization which saw the light of day in New York, October 30, 1875. Madame Blavatsky is generally credited by her followers with being its founder, but there is considerable doubt on this point. As originally organized the society was not intended as a medium for the propagation of esoteric Buddhism and Brahmanism, but for the prosecution of psychical studies. A lecture given in New York City by a certain George H. Felt, before a select coterie of ghost-seers, primarily led to the founding of the Theosophical Society.

The term "theosophy" was chosen expressly on the basis of the first meaning given to that word in Webster's Dictionary: "Any system of philosophy or mysticism which proposes to attain intercourse with God and superior spirits, and consequent superhuman knowledge, by physical processes, as by the theurgic operations of some ancient Platonists, or by the chemical processes of the German fire-philosophers." Hence the first sentence of the original preamble of the Theosophical Society reads: "The title of the Theosophical Society explains the objects and desires of its founders; they seek to obtain knowledge of the nature and attributes of the Supreme Power and of the higher spirits by the aid of physical processes."

Mr. Arthur Lillie, author of the remarkable work, *Madame Blavatsky and Her "Theosophy,"* writes as follows regarding the foundation of the Theosophical Society. He takes his facts mainly from Colonel Olcott and Mrs. Hardinge Britten, an original member of the Society. The Cairo experiences (of the Madame) being more recent than the Thibetan, the Theosophical Society was at first Egyptian as to its local color.

Its moving spirit was a Mr. Felt, who had visited Egypt and studied its antiquities. He was a student also of the Cabala, and he had a somewhat eccentric theory that the dog-headed and hawk-headed figures painted on the Egyptian monuments were not mere symbols, but accurate portraits of the "Elementals." He professed to be able to evoke and control them. He announced that he had discovered the secret "formularies" of the old Egyptian magicians.

Plainly, the Theosophical Society at starting was an *Egyptian* School of occultism. Indeed, Colonel Olcott, who furnishes these details ("Diary Leaves" in the *Theosophist*, November to December, 1892), lets out that the first title suggested was the "Egyptological Society."

Madame Blavatsky's mind, in short, was adaptive rather than original.

"She took spiritualism from Home, the Brothers of Luxor from Colonel Olcott, the notion of controlling "Elementals" from Mr. Felt. And hearing for the first time about Mahatmas from Dayānanda Sarasvati, she promptly assimilated them likewise."

In this occult society Madame Blavatsky came rapidly to the front and began to exploit the vagaries of Indian mysticism. Strange reports were set afloat concerning the mysterious appearance of a Hindoo adept in his astral body at the Society headquarters on Forty-seventh street. It was said to be that of a certain Mahatma Koot Hoomi, who left behind him as a souvenir of his presence a turban, which was exhibited on all occasions by Colonel Olcott.

After seeing the Society well established in America the modern priestess of Isis went to India, accompanied by Colonel Olcott.

She went first to Bombay, thence to Madras, and afterward to Adyar. A rambling East Indian bungalow was fitted up as the headquarters of the Theosophical Society, and a certain M. and Mme. Coulomb were installed as librarian and assistant corresponding secretary. One of the rooms of the bungalow was fitted up as an occult cabinet, or séance apartment, with a cupboard against the wall, known as the "shrine." In this shrine letters were received from the mahatmas, and from it were sent by a sort of spiritual post located somewhere in the fourth dimension of space. Astral appearances of adepts were seen in the room and about the grounds of the building: The news spread like wild-fire. Anglo-Indian theosophists flocked to the place. The genuineness of the phenomena was not doubted. But now Madame Blavatsky quarreled with the Coulombs. During her absence in Europe with Colonel Olcott, in 1884, the Coulombs were expelled from their positions by the general council of the Society. In revenge they published parts of

certain letters purporting to have been written them by the high priestess, in the *Madras Christian College Magazine*. "These letters, if genuine, unquestionably implicated Madame Blavatsky in a conspiracy to produce marvelous phenomena fraudulently."

The London Society for Psychical Research sent Doctor Richard Hodgson to India to investigate the matter and report upon the "occult phenomena" produced at the bungalow. His report, published in the transactions of the society for 1885, is most voluminous and painstaking. After perusing it no sane person can doubt the truth of his statements, viz., that jugglery and trickery were used to accomplish the so-called transportation of ponderable objects, including letters, through solid matter; the "precipitation" of handwriting and drawings on previously blank paper; astral appearances, et cetera.

Doctor Hodgson sums up his case as follows:

"1. She (Madame Blavatsky) has been engaged in a long-continued combination with other persons to produce by ordinary means a series of apparent marvels for the support of the theosophic movement.

"2. That in particular the shrine at Adyar, through which letters purporting to come from mahatmas were received, was elaborately arranged with a view to the secret insertion of letters and other objects through a sliding panel at the back, and regularly used for the purpose by Madame Blavatsky or her agents.

"3. That there is consequently a very strong general presumption that all the marvelous narratives put forward in evidence of the existence of mahatmas are to be explained as due either (a) to deliberate deception carried out by, or at the instigation of, Madame Blavatsky, or (b) to spontaneous illusion or hallucination, or unconscious misrepresentation or invention on the part of witnesses."

Sliding panels, secret doors and disguises constituted the *deus ex machina* of the theosophic mysteries.

Sitting in a London drawing room, usually her own, Madame would frequently exhibit her favorite tricks of the precipitated writing and the Indian mail. Someone would express a desire to have certain questions expounded by a mahatma.

"Behold!" the sibyl would cry, "the masters have come to your aid." Suddenly a mysterious envelope, covered with strange characters, would flutter apparently from the ceiling, or else be found in some out-of-the-way spot. On tearing open this envelope a letter from an eastern adept would be found, answering the queries. A confederate, of course, was employed to "materialize" the mis-sive. Thanks to her really remarkable conversational powers, Madame Blavatsky was able to adroitly lead people into asking questions that would tally with the mahatma message.

A number of books have been written about Madame Blavatsky and her theosophy. Perhaps the most interesting is that of the Russian journalist and litterateur, Vsevolod S. Solovyoff, who was in Paris in 1884, studying occult literature and preparing to write a treatise on psychic research. One day he read in the *Matin* that Madame Blavatsky had arrived in Paris. With a letter of introduction from a friend in St. Petersburg he visited the priestess at her residence in the Rue Notre Dame des Champs—a long mean street on the left bank of the Seine. He says: "I climbed a very, very dark staircase, rang, and a slovenly figure in an Oriental turban admitted me into a tiny dark lobby. To my question whether Madame Blavatsky would receive me the slovenly figure replied with an 'Entrez, monsieur,' and vanished with my card, while I was left to wait in a small, low room, poorly and insufficiently furnished.

"I had not long to wait. The door opened, and she was before me; a rather tall woman, though she produced the impression of being short, on account of her unusual stoutness. Her great head seemed all the greater from her thick and very bright hair, touched with a scarcely perceptible gray, and a trifle frizzed—by nature and not by art, as I subsequently convinced myself.

" . . . . I remarked that she was very strangely dressed, in a sort of black sacque, and that all the fingers of her small, soft, and, as it were, boneless hands, with their slender points and long nails, were covered with great jeweled rings."

So much for a striking pen picture of the pythoness. Madame received her fellow countryman most cordially. She begged him to join the Theosophical Society, and produced for him her astra-bell

phenomenon. She excused herself to see to some domestic duty, and on her return to the sitting room the phenomenon occurred. Says the journalist: "She made a sort of flourish with her hand, raised it upward, and suddenly I heard distinctly, quite distinctly, somewhere above our heads, near the ceiling, a very melodious sound like a little silver bell or an Æolian harp.

"What is the meaning of this?" I asked.

"This means only that my master is here, although you and I cannot see him. He tells me that I may trust you, and am to do for you whatever I can. *Vous êtes sous sa protection, henceforth and forever.*"

Solovyoff was not convinced of the genuineness of the phenomenon, but he said nothing to the madame. He asked himself this question: "Why was the sound of the silver bell not heard at once, but only after she had left the room and come back again?" However, he joined the society, and kept his eyes open.

Madame Blavatsky introduced him to the hierophant Olcott, who showed him the turban that had been left at the New York headquarters by Mahatma Koot Hoomi.

In August, 1885, he visited the madame at Wurzburg, Germany. It was after the Coulomb affair, and she was sick at heart and in body. A little Hindoo servant, Bavaji, was her sole attendant at the Spa.

"Every day," writes Solovyoff, "when I came to see the madame she used to try to do me a favor in the shape of some trifling 'phenomenon,' but she never succeeded. Thus one day her famous 'silver bell' was heard, when suddenly something fell beside her to the ground. I hurried to pick it up and found in my hands a pretty little piece of silver, delicately worked and strangely shaped. Hélène Petrovna changed countenance and snatched the object from me. I coughed significantly, smiled, and turned the conversation to indifferent matters."

At another time he was talking with her about the "Theosophist," and she mentioned the name of Subba Rao, a Hindoo, who had "attained the highest degree of knowledge." She requested the journalist to open a drawer in her writing desk and take from it a photograph of the adept.

"I opened the drawer," says Solovyoff, "found the photograph and handed it to her, together with a packet of Chinese envelopes, such as I well knew; they were the same in which the 'elect' used to receive the letters of the Mahatmas Morya and Koot Hoomi by 'astral post.'"

"Look at that, Hélène Petrovna! I should advise you to hide this packet of the master's envelopes farther off. You are so terribly absent-minded and careless.'"

Terrible was the rage of the high priestess of Isis at thus being detected. Her face grew as black as midnight. "She tried in vain to speak, but could only writhe helpless in her great armchair."

Solovyoff declares he then adroitly drew a confession from her. She said: "What is one to do when in order to rule men it is necessary to deceive them?" She begged him to go into a copartnership with her to astonish the world. He refused.

Then, after repeated denials of fraud, she broke down utterly and wrote him, according to his statement, a full confession of her many impostures. This confession she subsequently denied and declared a forgery. Forgery or not, the Paris theosophists believed it genuine, and their lodges were disrupted in consequence.

Soon after this event the great occultist went to England and made a convert of Annie Besant, the socialist, authoress and atheist. Finally came the end. The high priestess died in London, May 8, 1891. Her body was cremated and the ashes were divided into three equal portions, one of which was sent to Adyar, India, one to New York, and the third retained in London. The American shrine is a marble niche in the wall of the Theosophical headquarters, 144 Madison avenue. The ashes repose in a bronze urn.

And so ended the famous priestess of Isis. To her followers she was the greatest worker of miracles since the Christ. Once a year they celebrate the anniversary of her death. The day is called White Lotus day; why, I know not. The lotus in the East is the symbol of purity; it also typifies the doctrine of perpetual cycles of existence. The reader can make his or her own application of the emblem.

The question may now be asked: "Did Madame Blavatsky really



possess any occult powers, or was she simply a juggler with a well-rehearsed repertoire of sleight-of-hand tricks?" Such phenomena as the materialization of roses, astral-bell sounds and answers to sealed letters are well-known feats to any medium or conjurer. They are not dependent upon the exercise of psychic powers, but are effected by legerdemain. However, after all is said, I am of the opinion that she possessed one faculty bordering on the marvelous, namely, the power of hypnotizing, but like all hypnotizers she had to have a good subject. There are many people that are not hypnotizable, consequently she, like other alleged psychics, had to resort to trickery on many occasions to accomplish her ends.

I quote the following by Hereward Carrington, published in *Mahatma* not long ago. It may not be strictly scientific, but it is very interesting indeed: "Two of the principal phenomena that occurred, and of which Mr. Sinnett (a writer on Madame Blavatsky) makes the most, are 'the brooch incident' and 'the pillow incident.' Of these we will consider the 'pillow incident' only, as being the more perfect of the two. The following is a brief summary of the pillow incident: A party, including Madame, had gone to lunch, and were on the top of a hill, when Madame suddenly asked in what place Mr. Sinnett would like the article to appear, which he was expecting. It was very clearly stated that this expected article, a brooch, was not mentioned by Mr. Sinnett before and the subject had *not been led up to in any way*. This is the crucial point of the whole test. Mr. Sinnett thought a moment and then said: 'Inside that cushion.' He had no sooner uttered the word than his wife cried out, 'Oh, no, let it be inside mine.' This was agreed on. The cushion was now covered with a rug for about a minute; when it was opened, inside that was a second cushion. In the very center of this latter was found the brooch and a note from Koot Hoomi—the more important and communicative of the two mahatmas. But the brooch and the cushion had been in the Sinnett family for a number of years, so that the 'test' appeared to be absolutely conclusive.

"The principal point in this test is that the expected article was not mentioned before in any way. Apparently, then, the answer to

the question was entirely haphazard, and had never crossed Mr. Sinnett's mind before that instant. If that was the case the 'pillow incident' was certainly remarkable, but the writer holds that such was not the case.

"It must be acknowledged by all, that if Madame could have by any means foretold the place that was to be chosen as the recipient of the article, it would have been an easy matter to have placed it in there beforehand and triumphantly produced it at the critical moment. The only thing that would require careful manipulation would be the 'forcing' of that particular place on the victim. But there was *no* forcing in this case, as Mr. Sinnett is particular in reminding the reader, consequently it could not have been done in that subtle way.

"Madame pursued a much bolder plan, and, in the writer's opinion, caused the choices to fall upon the prepared places by means of employing post-hypnotic suggestions.

"Hypnotism is, undoubtedly, a true science, though there are so many humbugs playing under its 'role.' That it was known in India many hundreds of years ago, there cannot be the least doubt; moreover, it is much used by the yogis of the present day.

"What would be more natural, then, than to suppose that Madame should have learned the art in her sojourn in the East, and bringing it into the world—to which it was still somewhat new—in a little different form, she should have employed it, in many instances, to startling effect?

"As it does not necessarily follow that all magicians are acquainted with this subject, it may be said that post-hypnotic suggestion is a suggestion given to the *sensitive* (or person under the hypnotic influence), but which is not carried out until after he is again restored to perfect consciousness. Such suggestions seem to rise spontaneously from the mind of the subject, and *not* as if they had been previously suggested by the 'operator.' It seems to be merely the accidental thought of such a person.

"Now in the greatest of all 'tests,' viz., 'the pillow incident,' Madame could easily have placed the brooch in the cushion beforehand, then quietly hypnotized Mr. Sinnett and his wife the evening

before, and *suggested* that they should choose the cushion on being asked where they would like the brooch to reappear. When asked, the choice naturally fell on the prepared cushion.

"If Madame had failed, nothing would have been said about it, but as she succeeded, a grand 'test' was the result."

Madame Blavatsky is known to the world of letters as a writer of two ponderous works of a philosophical or mystical character, explanatory of the esoteric doctrine, viz., *Isis Unveiled*, published in 1877, and the *Secret Doctrine*, published in 1888. In the composition of these works she claimed "that she was assisted by the mahatmas who visited her apartments when she was asleep, and wrote portions of the manuscripts with their astral hands while their natural bodies reposed entranced in Thibetan lamaseries. These fictions were fostered by prominent members of the Theosophical Society, and believed by many credulous persons."

Madame Blavatsky had a very imperfect knowledge of Oriental languages, and this fact may account for the ludicrous mistakes in which the volumes abound, despite the aid of the ghostly mahatmas, who ought to have known better. Mr. William Emmette Coleman of San Francisco has made an exhaustive analysis of the madame's writings, and declares that *Isis* and the *Secret Doctrine* are full of plagiarisms. In *Isis* he discovered some two thousand passages copied from other books without proper credit.

Mr. Lillie, who had lived much in India and is an accomplished Orientalist, further questions the stories of Madame Blavatsky's Thibetan training and the Hindoo education, from internal evidence—her ignorance of Sanskrit as exposed by Max Müller, of the meanings of words commonly understood; the use of words professedly native but really inventions of her own; and the anachronisms displayed in her descriptions.

In *Isis Unveiled*, vol. ii, p. 609, is this statement: "We met a great many nuns traveling from Lha Sa to Kandi. . . . They take refuge in caves or viharas prepared by their co-religionists at calculated distances."

What would be thought of a modern traveler who announced that along the roads of Sussex he had met numbers of the "Valas"

or prophetesses of Woden, and that at the stone circles, where they stopped for the night, mead and the flesh of the boar Sæhrimmer were doled out to them? Buddhist viharas and Buddhist nuns have disappeared from Hindustan quite as long as the priests of Woden from England.

Besides, as Mr. Spence Hardy tells us, there are no female recluses in Ceylon. (*Eastern Monachism*, p. 61.)

He also shows the discrepancies between historical facts and Madame Blavatsky's autobiography—the gap in the story of her existence between October, 1848, when she fled from her husband, and May, 1857, a period when she was supposed to be in Thibet, though during the same period she was known to be in Paris and also in New Orleans.

Says the journalist, William T. Stead: "She was a woman who allowed herself to become the sport of circumstance, who organized her life by opportunism and ignored principle. The beautiful truths of Buddhism, which have deservedly exercised great influence on human thought, were but very superficially understood by Madame Blavatsky, who utilized them as she utilized magic or spiritualism when it served her turn, for her own ends."

Says Arthur Lillie: Madame Blavatsky's theosophy had one consistent principle—opportunism. Her "Esoteric Buddhism" was designed to win over the rich Hindoos, and to do this she was obliged to dethrone Brahma, Vishnu and Rama, and to put in their places the Mahatmas, the Dhyan Chohans. These Dhyan Chohans made the Kosmos, as Mr. Sinnett tells us. But as they are still alive in Thibet they confront us with a difficulty. Without a world there could be no Dhyan Chohans, and without Dhyan Chohans there could be no world. Then Madame Blavatsky had to get rid of the Indian ghost worship. Her mind, as I have often stated, lacks originality. But a book by an eccentric Frenchman gave her a hint.

This was the *Haute Magie* of Eliphas Levi. We here see how many million miles away the "Buddhism" of Madame Blavatsky was from that of Buddha. Supposing that there are mahatmas and that the Russian lady's miracles were genuine, does that take us

very far? Madame Blavatsky, a pauper, desired to use her magic to gain the lakhs of rupees of Mr. Sassoon and Holkar. Buddha, having a crown and countless gold pieces, desired to become a pauper. Madame Blavatsky had an ambition to astound the vulgar with duplicated diamond rings and astral postoffices. Buddha contemned diamonds and false applause. Madame Blavatsky worked entirely on the plane of matter, and sought to demolish Brahma and his legions. Buddha worked entirely on the plane of spirit, and sought the immortal world of Brahma, and the soul growth.

Had Madame Blavatsky contented herself with exploiting Vedantism and the so-called Esoteric Buddhism, all would have been well, and her following would have grown like the proverbial rolling snowball; but, alas, the madame was not content to pose as a philosopher of the occult and a missionary of Oriental doctrines, but essayed to bolster up her cause with pretended miracles and absurd stories of mahatmas. She was bound, like many mystical thinkers, to produce her Apocalypse for the edification and the stultification of her disciples. Her miracles were not above the average of ordinary conjuring and hypnotic feats, and the mahatma stories were as wildly improbable as those invented by the mythical Baron Munchausen.

We are living in an age of science where the searchlight of critical investigation is focused upon everything purporting to deal with the Unknown. The age of miracles is passed. The reign of law is upon us. Madame Blavatsky failed to take cognizance of this important factor when she propagated her Theosophical cult. Her mahatma revelations—especially those of Koot Hoomi and Morya—were too absurd to be believed. The theosophical card-castle, which she had erected with such patience and care, fell to the ground. Hundreds of intelligent theosophists left the Society, among them Doctor Elliott Canes, the eminent ornithologist. It is only fair to say as regards the societies existing to-day that no more miracles are worked to convince the skeptics. The order is largely given up to the earnest study of Vedantism, Buddhism and Neo-Platonism, and much honest and earnest work is being accomplished; especially so is this in the city of Washington, where the prime movers

of Theosophy are composed of ladies and gentlemen of intelligence. The charlataine side of Madame Blavatsky's character has been forgotten or covered with the mantle of charity. Her name is now revered as that of the founder of the Theosophical movement and the author of many curious works on the occult.

After the death of Madame Blavatsky there arose two claimants for the mantle of the great High Priestess, viz., William Q. Judge of America and Annie Besant of England. A bitter warfare was waged, whereupon the American branch of the general society seceded, and organized itself into the American Theosophical Society. Judge was made life president, holding the post until his death, in New York City, March 21, 1896. Mrs. Besant had to content herself with the English and Indian branches of the Society. She died a few years ago. The present head of the American theosophists is Katherine Alice Tingley, who claims to have been a bosom friend of Hélène Petrovna Blavatsky, 1,200 years B. C., when both were incarnated in Egypt.

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## PSYCHOLOGY ON THE "NEW THOUGHT" MOVEMENT.

IN the Gifford Lectures, delivered at Edinburgh during the year 1901-1902, by Prof. William James of Harvard University, and afterward published in book form,<sup>1</sup> there are many comments upon the movement known as "New Thought." These come from a doctor of medicine, a professor of philosophy and a prominent psychologist, and when brought together show how the New Thought philosophy appears, considered objectively from a psychological and scientific standpoint. Moreover, the book furnishes a kind of background against which the movement can be measured; and it is here attempted to outline that background for the reader by adding some of the lecturer's general summaries and conclusions.

The religious experiences that formed the subject of the lectures were, in Dr. James's words, "the feelings, acts and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider the divine"; and the term "divine" was not taken in any narrow sense, for systems of thought in which the existence of a God is not positively assumed were considered as religious. The lecturer's method of treating this subject was by analysis and comparison; he took up and considered concrete cases of personal religious experience, and deduced their fundamental principles by distinguishing the essential characteristics common to all from such superficial differences as were incidentally due to creed, race, temperament, intellectual force or historical setting. This is analogous to the case method of studying law, which his colleague, Prof. Langdell, estab-

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<sup>1</sup>*Varieties of Religious Experience*, by William James LL. D., etc. London and New York: 1903.

lished at Harvard, and which has spread and transformed the study of Common Law. That method has produced a literature of such books as Langdell's *Cases on Contracts*, Ames's *Cases on Torts*, Gray's *Cases on Property*, etc., and this book might not inaptly be called, James's *Cases on The Subliminal Consciousness*.

It is in an early chapter entitled "The Religion of Healthy-Mindedness" that most of the comment on New Thought is found. There is a natural optimism which enables its possessor to enjoy life uninterruptedly. Dr. James gave some cases of this happy temperament, and pointed out that the resulting attitude of grateful admiration for the gift of existence was in itself a kind of religious feeling. Such unreflecting optimism he distinguished as involuntary healthy-mindedness, and then went on to say that a healthy-minded attitude, as such, could be deliberately adopted and systematically practiced as a religion. On that point he makes these psychological criticisms:

"The systematic cultivation of healthy-mindedness as a religious attitude is consonant with important currents in human nature, and is anything but absurd. . . . Every abstract way of conceiving things selects some one aspect of them as their essence for the time being, and disregards their other aspects. Systematic healthy-mindedness, conceiving good as the essential and universal aspect of being, deliberately excludes evil from its field of vision; and although, when thus nakedly stated, this might seem a difficult feat to perform for one who is intellectually sincere with himself and honest about facts, a little reflection shows that the situation is too complex to lie open to so simple a criticism."

Dr. James says that every emotional state is, and must be, blind to opposing facts. If melancholy rules, the thought of good cannot acquire the feeling of reality; while by "the man actively happy, from whatever cause, evil simply cannot then and there be believed in. He must ignore it; and to the bystander he may then seem perversely to shut his eyes to it and hush it up."

There are several modern tendencies that have promoted the growth of healthy-mindedness as a religious attitude. The advance of "liberalism" in the Christian Church during the past fifty years

is one; the popular spread of the scientific theory of evolution, with the doctrine of universal progress, is another; New Thought is still another; and in Dr. James's opinion it is the most weighty of them all. He says:

"To my mind a current far more important and interesting religiously than that which sets in from natural science towards healthy-mindedness is that which has recently poured over America and seems to be gathering force every day, and to which, for the sake of having a brief designation, I will give the title of the 'Mind-cure movement.' There are various sects of this 'New Thought,' to use another of the names by which it calls itself; but their agreements are so profound that their differences may be neglected for my present purpose. . . . It is a deliberately optimistic scheme of life, with both a speculative and a practical side. In its gradual development during the last quarter of a century, it has taken up into itself a number of contributory elements, and it must now be reckoned with as a genuine religious power. . . . One of the doctrinal sources of Mind-cure is the four Gospels; another is Emersonianism or New England transcendentalism; another is Berkeleyan idealism; another is spiritism; another the optimistic popular science evolutionism of which I have recently spoken; and, finally, Hindooism has contributed a strain."

Dr. James says that the practical character of New Thought especially characterizes it. "The plain fact remains that the spread of the movement has been due to practical fruits, and the extremely practical turn of character of the American people has never been better shown than by the fact that this, their only decidedly original contribution to the systematic philosophy of life, should be so intimately knit up with concrete therapeutics. To the importance of mind-cure the medical and clerical professions in the United States are beginning, though with much recalcitrancy and protesting, to open their eyes. It is evidently bound to develop still farther, both speculatively and practically.

"The leaders in this faith have had an intuitive belief in the all-saving power of healthy-minded attitudes as such; in the conquering efficacy of courage; and a correlative contempt for fear

and all nervously precautionary states of mind. Their belief has in a general way been corroborated by the practical experience of their disciples; and this experience forms to-day a mass imposing in amount.

"This system is wholly and exclusively compacted of optimism. 'Thoughts are things,' as one of the most vigorous mind-cure writers prints in bold type at the bottom of each of his pages; and if your thoughts are of health and vigor, before you know it these things will also be your outward portion. No one can fail of the regenerative influence of optimistic thinking, pertinaciously pursued.

"The mind-cure principles are beginning so to pervade the air that one catches their spirit at second hand. . . . More and more people are recognizing it to be bad form to speak of disagreeable sensations, or to make much of the ailments of life. These general tonic effects would be good even if the more striking results were non-existent. But the latter abound.

"The blind have been made to see, the halt to walk; lifelong invalids have had their health restored. The moral fruits have been no less remarkable. Regeneration of character has gone on on an extensive scale."

Discussing New Thought belief on its speculative side, Dr. James says:

"The fundamental pillar on which it rests is nothing more than the general basis of all religious experience, the fact that man has a dual nature, and is connected with two spheres of thought, a shallower and a profounder sphere, in either of which he may learn to live more habitually."

The shallower sphere is, of course, the physical; but, whereas Christian theology has always considered frowardness to be the essential fault of this part of human nature, the mind-curers say that the mark of the beast in it is—*Fear*; and this, in his opinion, gives "an entirely new religious turn to their persuasion."

An extract from another part of the lectures, where the immediate subject of discussion was the heroic aspect of asceticism, may be inserted here by way of commentary on this "entirely new religious turn." He there said:

"In these remarks I am leaning only on mankind's common instinct for reality, which in point of fact has always held the world to be essentially a theater for heroism. In heroism, we feel life's supreme mystery is hidden. We tolerate no one who has no capacity for it whatever in any direction. On the other hand, no matter what a man's frailties otherwise may be, if he is willing to risk death, and still more if he suffer it heroically, in the service he has chosen, the fact consecrates him forever. Inferior to ourselves in this or that way, if yet we cling to life, and he is able to 'fling it away like a flower,' as caring nothing for it, we account him our born superior. Each of us in his own person feels that a high-hearted indifference to life would expatiate all his shortcomings."

The profounder sphere of thought with which our dual nature is connected is, of course, the spiritual; the mind-curers' theory of the higher part of human nature also differs strikingly from the theological theory. "The spiritual in man appears in the mind-cure philosophy as partly conscious, but chiefly *subconscious*; and through the subconscious we are already one with the Divine without any miracle of grace, or abrupt creation of a new inner man. As this view is variously expressed by different writers, we find in it traces of Christian mysticism, of transcendental idealism, of Vedantism, and of the modern psychology of the subliminal self."

Of the Subliminal Self, or Subliminal Consciousness, Dr. James says:

"I cannot but think that the most important step forward that has been made in psychology since I have been a student of that science is the discovery, first made in 1886, that, in certain subjects at least, there is not only the consciousness of the ordinary field, with its usual center and margin, but an addition thereto in the shape of a set of memories, thoughts and feelings, which are extra-marginal and outside of the primary consciousness altogether, but yet must be classed as *conscious* facts of some sort, able to reveal their presence by unmistakable signs. I call this the most important step forward because, unlike the other advances which psychology has made, this discovery has revealed to us an entirely unsuspected peculiarity in the constitution of human nature."

Going on to show the importance of this discovery, he explained that the expression "field of consciousness" was a recent term in psychology; that until lately psychologists had considered the unit of mental life to be the single "idea," a well-defined thing; but that now they tended to consider such unit to be the entire wave of consciousness, or field of objects, present to the thought at any one time. He further explained that modern psychology, while admitting that it seemed impossible to outline this "field of consciousness" definitely, had, nevertheless, taken it for granted that "what is absolutely extra-marginal is absolutely nonexistent, and cannot be a fact of consciousness at all."

The discovery of an extra-marginal consciousness changes this, and Dr. James says:

"In particular this discovery of a *consciousness* existing beyond the field, or subliminally, casts light on many phenomena of religious biography."

The suggestiveness of this discovery is emphasized in a final lecture, where Dr. James sums up his conclusions on the whole subject of religious experience. He concludes that under all discrepancies all creeds agree in their testimony on two points: That there is *something wrong about us* as we naturally stand; and that *we are saved from the wrongness* by establishing the right relation with higher powers. He concludes that there are the same progressive stages in every religious experience. The individual who suffers from this sense of wrongness, and begins to criticise it, is to that extent conscious of something higher, if anything higher exists. Along with the wrong part of him there is thus a higher part of him, though this may be but a helpless germ, and though it may not be obvious with which part of him he had better identify his real being. When, however, the crisis is reached, the individual "identifies his real being with the germinal part of himself" in the following way: "He becomes conscious that this higher part is coterminous and continuous with a MORE of the same quality, which is operative in the universe outside of him, and which he can keep in working touch with, and in a fashion get on board of, and save himself when all his lower being has gone to pieces in the wreck."



How much objective truth is there in such psychological feelings? Does that MORE, of the same quality, really exist and really act? If so, in what shape does it exist, and in what manner does it act? Dr. James says all theological creeds agree that it does exist; their differences are in regard to the way in which it acts. Just how "union" between the individual and this MORE is made, is the point over which "pantheism, theism, nature and second birth, works and grace and karma, immortality and reincarnation, rationalism and mysticism, carry on inveterate disputes." But he believes that we can sift out of their differences a body of doctrine common to all, and formulate it in terms to which physical science need not object. He says: "The *subconscious self* is nowadays a well-accredited psychological entity; and I believe that in it we have the term required. . . . Let me propose, as an hypothesis, that whatever it may be on its *farther* side, the MORE with which in religious experiences we find ourselves connected is on its *hither* side the subconscious continuation of our conscious life."

Difficulties commence the moment we ask how far our trans-marginal consciousness carries us if we follow it on its remoter side. Here different religions come with their different creeds, which he terms "over-beliefs," and does not pass upon; but he says: "Disregarding the 'over-beliefs' and confining ourselves to what is common and generic, we have in the fact that the conscious person is continuous with a wider self through which saving experiences come, a positive content of religious experience which, it seems to me, is literally and objectively true as far as it goes."

According to New Thought belief, the individual becomes united with the MORE by passive relaxation; or, to be more accurate, each of us is already united with the source of infinite and eternal energy, and the one thing needful is to recognize that fact.

Dr. James is struck by the "psychological similarity between the mind-cure movement and the Lutheran and Wesleyan movements. To the anxious query, 'What shall we do to be saved?' Luther and Wesley replied, 'You are saved now, if you would but believe it.' To the anxious query, 'What shall we do to be

whole?" the mind-curers reply, 'You are whole already, if you did but know it.' Both doctrines teach that the way is in passivity, not activity; relaxation, not intentness; that the seeker must give up the feeling of responsibility; let go his hold; trust the care of his destiny to higher powers; and he will find that he gains not only a perfect inward reward, but often, also, the particular thing he thought he was renouncing."

He says:

"Whatever its ultimate significance may prove to be, this is certainly one fundamental form of human experience. With those who undergo it in its fulness, no criticism avails to cast doubt on its reality. They *know*; for they have actually felt the higher powers in giving up the tension of the personal will. . . . The mind-curers have given the widest scope to this sort of experience. They have demonstrated that a form of regeneration by relaxing, by letting go, physiologically indistinguishable from the Lutheran justification by faith and the Wesleyan acceptance of free grace, is within the reach of persons who have no conviction of 'sin' and care nothing for the Lutheran theology. It is but giving your little private convulsive self a rest and finding that a greater Self is there. The results, slow or sudden, great or small, of the combined optimism and expectancy, the regenerative phenomena which ensue on the abandonment of effort, remain firm facts of human nature, no matter whether we adopt a theistic, a pantheistic-idealistic or a medical-materialistic view of their ultimate causal explanation."

The psychology of relaxation is explained in a chapter on "Conversion." A great many cases of conversion are reviewed, some voluntary and gradual, others so sudden as to have been called miraculous; and analysis of them shows that there is always a point in the process at which the personal will is either surrendered, or ceases from sheer exhaustion, or is overwhelmed by an inrush or uprush from some source uncomprehended by the individual who receives it. The psychology of our moods and their alternations; of character and the differences of character between different men, and of changes of character in a single individual,

was first discussed. These processes are analogous. They result from a change in the balance between impulses and inhibitions, many of which are partly or wholly sub-conscious, a *shift* of the center of the field of consciousness, and the substitution of a new group of "associated ideas" for the former group. How the process of conversion is helped at the critical moment by a temporary letting-go is shown by a familiar illustration. When we try to recall a forgotten name our efforts, *at first*, start up processes in the subliminal consciousness, where all "forgotten" experiences are recorded. But, as we go on struggling to recall the lost name, the efforts of the conscious mind *jam* the operations of the sub-conscious, just at the "threshold of consciousness." All know the mental discomfort then felt. If now we will turn away our conscious attention from the subject, "in half an hour (to use Emerson's words) the lost name comes sauntering into your mind as carelessly as if it had never been invited."

In a religious conversion the situation is analogous. The candidate has two ideas in his mind—the "sin" from which he would escape and the "salvation" to which he would attain. His idea of "sin" is distinct; his idea of "salvation" is vague; so much so that the ideal actually attained is generally different from that which was sought. The conscious effort toward "salvation" is "a process of struggling away from sin rather than of striving toward righteousness." The new ideal is being formed chiefly in the deeper, sub-conscious mind, and like the lost name it gets *jammed*. Then follow acute distress, desperate self-surrender and consequent release of the pent-up ideal with something like a revelation.

Religion and psychology agree in this. There is a force beyond consciousness which brings help to the individual. Religion attributes this force to Deity; psychology does not affirm that it transcends the individual's sub-conscious self.

The personal will works in the ordinary or primary field of consciousness. To let the will go, to relax the finite personal self, as a means of establishing communication between the primary consciousness and the subliminal consciousness, and through

the subliminal consciousness with any MORE beyond, is psychologically reasonable. New Thought philosophy advocates doing this systematically, though the practice did not originate with New Thought. Dr. James says: "Mind-cure has made what in our Protestant countries is an unprecedentedly great use of the sub-conscious life. To their reasoned advice and dogmatic assertion its founders have added systematic exercise in passive relaxation, concentration and meditation."

A like practice has always been a part of Hinduism, Buddhism and Mohammedanism; and in the Christian Church there have always been mystics and a codified system the basis of which is orison. In relaxation, concentration and meditation the mystic's object is to become conscious of the continuity of his finite self with the Infinite. In Dr. James's words, "This overcoming of all the usual barriers between the individual and the Absolute is the great mystic achievement. In mystic states we both become one with the Absolute and we become aware of our oneness. This is the everlasting and triumphant mystical tradition, hardly altered by difference of clime or creed. In Hinduism, in Neoplatonism, in Sufism, in Christian mysticism, in Whitmanism, we find the same recurring note, so that there is about mystical utterances an eternal unanimity which ought to make a critic stop and think."

The psychological condition known as the "mystical state of consciousness" is one both of feeling and of knowing, and always possesses the four characteristics of ineffability, a transcendent insight, transient duration, and a sense of passivity. It is not sustained for long at any time, but it is recurrent; and when it sets in, the mystic feels as if his own will were in abeyance and he were being carried along by a superior power. This is not, however, like the passivity that marks the phenomena of alternative personality, or trance, or any automatism; for in mysticism there always remains a perfect memory of the experience, as well as a deep sense of the importance of its meaning. No state of feeling can be satisfactorily described to those who have not themselves felt it; being in love is an example of this. But the feeling that marks the mystical state of consciousness seems to baffle verbal

expression so utterly that it is no wonder we find the term "mysticism" generally used as a term of condemnation to throw at opinions that seem vast and vague and without foundation in fact or reason. As a state of knowing, mystical consciousness is characterized by a sense of perceiving truths that transcend the range of the discursive intellect. This peculiar "noetic" quality marks even the most elementary stages of this psychological condition, while in the more developed mystic states problems of being, so profound that their very investigation had not been dreamed of, seem to be made plain as if by a flash of light; and these illuminations and revelations, articulate though they remain, "as a rule carry with them a curious sense of authority for after time." Sometimes they relate to a familiar phenomena of the objective world, but more often to the attractions of metaphysics or cosmology, so that another name for the mystical state is the "state of cosmic consciousness."

Dr. James said that he could treat the subject of mysticism at second-hand only, for his own constitution shut him out almost entirely from the kind of experiences that were given in his collection of cases on this topic; but there are experiences, not unfamiliar, that must be regarded psychologically as rudimentary states of mystical consciousness and his review of these gives any critic some idea of the nature of the state. The simplest case is the sudden sense of realizing the full meaning of some saying which has been a proverb from the nursery, but the truth of which has never been felt before. This sudden sense of deeper significance is not confined to entire sentences; a single word, an effect of light, an odor or a musical sound may cause it. Poetry and music owe their power to this. "We are dead or alive to the eternal inner message of art according to whether we have kept or lost this mystical susceptibility." A more pronounced case is that peculiar sense that not rarely possesses us of having "*been here before*," in just this place, with just these people, saying just these things. A little more and we come to a "realm that public opinion and ethical philosophy have long since branded as pathological, though private practice and certain lyric strains of poetry seem still to bear witness

to its ideality—the consciousness produced by intoxicants and anesthetics, especially by alcohol. . . . The sway of alcohol over mankind is unquestionably due to its power to stimulate the mystical faculties of human nature. . . . Drunkenness unites and expands . . . Not through mere perversity do men run after (alcohol). . . . It is part of the deeper mystery of life that whiffs and gleams of something that we immediately recognize as excellent should be vouchsafed to so many of us only in the earlier phases of what in its totality is so degrading a poisoning.”

An example of the mystical state of consciousness, not rudimentary but highly developed, is the peace of mind that immediately follows a religious conversion, filling the very hour of change. It is a state of *assurance* rather than of faith; its characteristics can be specified, but Dr. James says it is probably hard for any one who has not been in the state to appreciate its intensity of feeling. There is in it a sense of being under a higher control. There is a sense of entire *willingness to be*, even though conditions should remain the same. The idea of personal “salvation” that usually accompanies the change in Christians is not essential to this state. It is something apart from the satisfaction of personal salvation. “A passion of willingness, of acquiescence, of admiration, is the glowing center of this state of mind. . . . The second feature in a sense of perceiving truths not known before. . . . A third peculiarity is the objective change which the world often appears to undergo. An appearance of *newness* beautifies every object. . . . The most characteristic of all the elements of the conversion crisis is the ecstasy of happiness produced. . . . The transition from tenseness, self-responsibility and worry to equanimity, receptivity and peace is the most wonderful of all those shiftings of

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<sup>1</sup>*Conf.* “The one thing which we seek with insatiable desire is to forget ourselves, to be surprised out of our propriety, to lose our sempiternal memory, and to do something without knowing how or why; in short, to draw a new circle. . . . ‘A man,’ said Oliver Cromwell, ‘never rises so high as when he knows not whither he is going.’ Dreams and drunkenness, the use of opium and alcohol, are the semblance and counterfeit of this oracular genius, and hence their dangerous attraction for men.”—Emerson: “Circles.”



inner equilibrium, those changes of the personal center of energy, which I have analyzed so often, and the chief wonder of it is that it so often comes about, not by doing, but by simply relaxing and throwing the burden down. This abandonment of self-responsibility seems to be the fundamental act in specifically religious, as distinguished from moral practice. It antedates theologies and is independent of philosophies. Mind-cure, theosophy, stoicism, ordinary neurological hygiene, insist on it as emphatically as Christianity does, and it is capable of entering into closest marriage with every speculative creed."

In another place he writes: "There is a state of mind known to religious men, but to no others, in which the will to assert ourselves and hold our own is displaced by a willingness to close our mouths and be as nothing in the floods and waterspouts of God. The time for tension in our soul is over, and that of happy relaxation, of calm deep breathing, of an *eternal present*, with no discordant future to be anxious about, has arrived. Fear is not held in abeyance as it is by mere morality; it is positively expunged and washed away. . . . This sort of happiness in the absolute and everlasting is what we find nowhere but in religion. . . . In its most characteristic embodiments, religious happiness is no mere feeling of escape. . . . It cares no longer to escape."

Dr. James says that the mere fact that a thing originates in the subliminal part of the mind, or arrives by way of it, is no proof of its divine character, and does not make it authoritative as divine. But he points out that the question of origin is quite distinct from the question of worth. He explains that we follow two orders of inquiry concerning anything: "First, what is the nature of it? How did it come about? What is its constitution, origin and history? Second, what is its importance, meaning or significance, now that it is once here?" The answers are, respectively, what the books on logic term an *existential proposition* and a *proposition of value*; and the second cannot be deduced from the first. To determine the value of these mystical experiences we should criticise them as any other objective fact is criticised, basing our judgment on

their "immediate luminousness, philosophical reasonableness, and moral helpfulness." Of course, a "revelation" possesses immediate luminousness for the mystic who receives it. Dr. James says: "Mystical states, when well developed, usually are, and have the right to be, absolutely authoritative over the individuals to whom they come;" the mystic's position is invulnerable to argument; he has *felt*; and that, after all, is all that we have done with our ordinary senses. In his opinion, "no authority emanates from mystical states which should make it a duty for those who stand outside them to accept their revelations uncritically." But as to the reasonableness of these revelations, he notes that they do not *contradict* the facts of ordinary consciousness, but only add new meaning to them; they do not deny that reason has truth, but do not admit that reason has all the truth there is. "They break down the authority of the rationalistic consciousness, based upon the understanding and the senses alone. They show it to be only one kind of consciousness. They open out the possibility of other orders of truth." Finally, the results of mysticism seem to be morally helpful. Dr. James concludes that its practical effect on character is strengthening, not weakening. Although in subjects of feeble disposition and narrow intellect these results have sometimes been stupefaction and an unfitting for practical life, upon natively strong dispositions and intellects the results are quite opposite. "The great Spanish mystics, who carried the habit of ecstasy as far as it has often been carried, appear for the most part to have shown indomitable spirit and energy;" Loyola, the founder of the Jesuits, was "one of the most powerfully practical engines that ever lived."

The mystical state of consciousness is transient, but, as noted above, after it has been felt once, whenever it recurs its peculiar quality is instantly recognized. Dr. James says that between recurrences it "is susceptible of continuous development in what is felt as inner richness," and that in mysticism "personal religious experiences have their root and center." The habitual mental attitude of "saintliness" seems to be always bordering upon cosmic consciousness, and frequently rising to it. Dr. James warned his hearers that

"saintliness" must not be mistaken to mean sanctimoniousness. It is the condition that follows a conversion which effects a permanent transformation of the individual's nature. He gives these typical features of "a composite photograph of universal saintliness," the same in all religions: "1. A feeling of being in a wider life than that of this world's selfish little interests, and a conviction, not merely intellectual, but, as it were, sensible, of the existence of an ideal power." This may or may not be personified. "2. A sense of the friendly continuity of the ideal power with our own life, and a willing self-surrender to its control. 3. An immense elation and freedom, as the outlines of the confining self-hood melt down. 4. A shifting of the emotional center toward loving and harmonious affections." In a final summary, he says that the cases all show that the following beliefs are characteristic of the "religious life:" "1. That the visible world is part of a more spiritual universe, from which it draws its chief significance. 2. That union or harmonious relation with that higher universe is our true end. 3. That prayer or inner communion with the spirit thereof is a process wherein work is really done, and spiritual energy flows in and produces effects, psychological or material, within the phenomenal world." All these attributes of saintliness flow "from the sense of the divine, as from their psychological center." Whoever possesses this sense sees the significance of the smallest details in their relation to the divine order, and the contemplation of this divine order yields him a steadfastness of spirit with which no other can compare.

Religion is the faith-state combined with a creed. The creed is a secondary thing, an intellectual growth; religion is essentially a matter of feeling and conduct, and the characteristic feelings are the same in all religions, however the intellectual content may vary. Dr. James says these feelings belong to the "sthenic" order; they are expansive, tonic, freshening to vital power. The faith-state is "a biological as well as a psychological condition, and Tolstoi is absolutely accurate in classing faith among the forces by which men live." Considering religions as purely subjective, without regard to the truth of creeds, he concludes that "we are obliged, on account

of their extraordinary influence upon action and endurance, to class them among the most important biological functions of mankind."

To conclude, I briefly recapitulate the foregoing facts and comments, and thus group them:

I. A deliberate mental attitude of optimism is psychologically reasonable. In New Thought practice the experiment of deliberate optimism has been tried on a large scale, and the results, material as well as mental, now form an imposing mass of objective fact.

II. Hero worship is instinctive with mankind. New Thought belief holds that the specific defect of the inferior side of man's dual nature is not positive, but negative; not frowardness, but lack of courage; as a religious creed this is new.

III. The discovery that there exists a fact of consciousness beyond the threshold of our primary or ordinary consciousness, marks a very important advance in the science of psychology. New Thought belief holds that the superior part of man's dual nature trends into the subliminal consciousness, and that through the subliminal mind every individual is united with a Universal Mind.

IV. All religions hold that there is something not ourselves from which we can obtain help; psychology agrees that there is something beyond our ordinary consciousness from which help comes, but cannot say that that something transcends the individual's sub-conscious self. New Thought practice systematically seeks help by way of the subliminal mind.

V. Psychology has suggested that conscious intentness probably raises the threshold of consciousness, and hinders the advent of ideas originating in the subliminal mind. It is a fact of experience that regenerative phenomena ensue upon the abandonment of intentional effort by the ordinary consciousness. New Thought advocates systematic mental relaxation and meditation. As a religious practice this is not new. It is found in the oldest religious systems known, the alleged effect being that the individual thereby becomes sensibly conscious that he is one with the Absolute. New Thought

belief further holds that the individual thereby draws upon an infinite energy, and therewith produces physical effects in the objective world. The remarkable growth of the New Thought movement must be attributed to practical "fruits."

VI. The characteristics of the transient state known as mystic consciousness resemble the characteristics of the habitual religious attitude of saintliness. The religious attitude, considered even as a subjective mental condition, must be deemed one of the most important biological functions of mankind.

VII. An alleged result of relaxation, concentration and meditation is the revelation of truths that transcend the knowledge obtained by the senses and reason alone. It has been noted that such quired knowledge, but have only claimed to add meaning to them.

These facts and opinions constitute Dr. James' testimony on "New Thought," so far as he deals with that subject in this particular book. This testimony is incidental. The main purpose of the book is not to criticise the "New Thought" movement, but to study individual religious experiences, as such, and to show under what conditions these have their origin, through what stages they pass, how they terminate, by what results they are followed, and what such "fruits" are worth. Yet this testimony, incidental though it is, is valuable, for, as an ordinary witness to fact, Dr. James is exceptionally well informed, and, as an expert, he is qualified to give opinion evidence. As a rule both the advocates and the opponents of "New Thought" agree in this—they are rather intemperate critics. The former usually make large assertions unsupported by any reasoned argument, and the latter usually dismiss these claims as pure bewilderment and moonshine, undeserving rational refutation. Dr. James' method is refreshingly different from either of these extremes, for it is marked by open-mindedness, reasonableness and moderation of statement.

As stated at the beginning of this paper, its sole object has been to pick out this incidental but valuable testimony and to put it concisely before the reader, leaving him to criticise for himself its rele-

vancy and force, and to reach his own verdict by the exercise of his own judgment. For this reason I have had to refrain from giving any opinion of my own as to these facts, or from going into any critical examination of Professor James' opinion as to these facts. For the same reason I am restrained from making any digressions into those portions of Professor James' book which do not bear directly upon these facts.

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## THE ÉLITE OF DEMOCRACY.<sup>1</sup>

SINCE the history of the nineteenth century is dominated by the social phenomenon of the universal tendency to promote the education of the masses, it is probable that the history of our new epoch will in turn be dominated by the action of these masses. They are already palpitating with hope. They are expressing their wishes through the agency of the individuals of their choice. By this choice they make known their tastes and their tendencies. These individuals, when chosen, are the units of the new contemporary élite, a "representative" and "variable" aristocracy.

In all civilized countries the problems of sociology are every day more imperatively demanding attention. It seems, indeed, that most of us have agreed, on principle, to work for a better social state. There is a sort of harmony between the vague but enthusiastic thoughts of a workingman summoning the new era, and the persistence of a social philosopher striving to reduce the sum of human suffering. We no longer discuss the value of the expression, "social solidarity;" some of us even pronounce these words with almost religious reverence. "Corporations" and "associations" of every kind abound. "Sociology" is bringing thinkers and people together. And the other sciences no longer disdain popularization. Their devotees are leaving the solitary heights where they formerly enjoyed a selfish pleasure. A great leveling process is going on. The era of democracy is at hand.

The social problems now pressing for solution are essentially modern. The political economists of the last century emphasized

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<sup>1</sup>Translated by Prof. W. H. Carruth, University of Kansas.

the importance of the economic conditions regulating our style of living and our social relations. Under the powerful leadership of Karl Marx the fine rhetoric of the Utopians of '89 became a system supported by exact documents. Reread *Capital*; from the spherical contact of things common conditions and laws result; the social evolution can be accomplished only as these conditions and free social intercourse are regulated. The "*laissez faire*" of Adam Smith cannot withstand the severe attacks of Lasalle upon wages and their significance. Henceforth the political ideologist must drop anchor; he may no longer sail at random toward the horizon where the mirage is rising. Let him devote his attention to the price of grain, the market quotations. On the other hand, old-time governments, whether empires or kingdoms, seem to our contemporaries antiquated forms of government, obnoxious to minds enamored of justice and anxious to balance reasons, even overlooking all the details for the sake of securing this balance and harmony. At school, on the street, in the universities, in the daily papers, the maxims that the French revolution hurled into the hearts of men are no longer subject to discussion. The words Liberty, Equality, Fraternity are no longer mere symbols of philosophic conceptions; they represent facts. At least, modern democracy has so decreed.

Its ideal is a society logically organized and perfectly equitable. Even in the somewhat advanced philosophy of M. Fournierè this ideal seems the only one worthy of attainment. The right of participation belongs to all; all citizens not only have the right to take part in the common life, but they are part and parcel of the social life, which is of supreme importance, and is but the outward manifestation of their individuality. The totality of this tumultuous, swarming social life crystallizes into groups conscious of common interests, and these, solidary by reason of these interests, secure the proportional distribution of labor and compensation, according to the needs and abilities of each.

Toward this ideal modern society is tending. Political powers, though cautiously keeping up the customs of past times, are being gradually won over to this conception of the State. And the populace, the masses, having become certain of possessing not only

rights but also powers, and excited and carried away by oratorical leaders, their spiritual representatives, form organizations, and in their turn excite and carry away their leaders.

This democracy appears to be the most advanced social form, the ultimate stage. And the problem that occupies us is this:

In this organization which seems to give such exceeding importance to groups of the élite, what are the characteristics of the élite; what are their manifestations; what are their means of action; what are the motives that prompt them to action; how is the membership of the group increased; and are they, belonging to the élite, really élite, or select, individuals?

In order to exhaust this field of study we propose to analyze in a series of articles the whole of contemporary social psychology. We shall find the bulk of our illustrations in France, but we shall not limit our observations to this country; we intend to speak of all the democracies that exist in the world—for example, of the United States and of Switzerland.

Forthwith, at the very threshold of this article, of this bird's-eye view which is to serve us as an orientation, we must indicate the spirit in which these essays are to be conceived. We wish to look at existing society as a mildly philosophical enquirer. We shall nowhere attempt to display erudition. We hope to express our indignations and our dislikes with more fire than is permitted by a solemn tone all inflated with learning. And here is the first source of our wrath:

Democracies, or at least the French democracy, neglect systematically to-day the select individual. The heroes whom they admire, whom they patronize, whom they elevate to rule over them, must first of all renounce their own individuality, must be nothing but the echo of the desires and the tastes of social groups. The masses admire themselves in their representatives and they admire nothing but their representatives.

And this is deplorable.

In the first attempts at human society—if we may believe the specialists who have devoted themselves to reconstructing the physiognomy of that society—the victory belonged solely to the pos-

essor of muscular power. The *élite* individual was the *strong* individual. Among savages of the present day, whom, according to Feuerbach, we must consider as belonging to a backward society yet one quite as old as our own, psychical qualities have come into play, and cunning—not to speak of intelligence—is employed in the service of brute force. The *élite* savage controls his subjects by knowing how to apply his force. He must not forget that these tribes have their traditions, their past, which compels their chiefs to follow certain paths, and which introduces new complications. But even here force retains its aureole. It is always victorious. It has been modified somewhat. Aided by cunning, by intuitive and elementary cunning, this force, which is triumphant from the social point of view, approaches perceptibly that which is manifested by every human organism in the struggle for existence. The *élite* individual exists as such among savages. It is hard to imagine that groups of *élite* could grow up among them.

Ancient societies, which became organized under the influence of divers motives—emotional, religious, economic—gave legal sanctions to these individuals. The victors united to impose their will upon the vanquished. They established castes. The superior castes determined the duties, the obligations and even the sensations of the inferior castes. India is the classic example of this sort of social formation. Here the *élite* are no longer determined in accordance with a criterium of brute force. Barriers are erected in society. Ruling families constitute the *élite*, and it is only in this privileged sphere that individuals can in their turn distinguish themselves and become *élite* individuals.

Later a new element enters into play. Among the Greeks we do not find castes, but social classes, and the *élite* are no longer exclusively the ruling class. Superior individuals may spring from any family. Generals, artists, philosophers, priests and oracles, orators and courtesans labor together to create the genius of the race. Over against Aristides, Leonidas, Themistocles—in whom, despite their readiness to sacrifice themselves for the common good, we shall perhaps recognize after all representatives of the conquerors by cunning force—over against these superior individuals, who

direct and govern, these military chiefs, arise Socrates, Plato, Aristotle, philosophers, orators, poets, tragedians, select individuals, themselves holding a very definite place in the history of their city, and this thanks to intellectual works, which present no immediate interest for the government of the city. In another study we shall return to this prodigious period. Never was the individual freer to manifest his powers. But there were so many slaves in this fair Hellos that to be born Greek was after all to belong to a superior caste.

Among the Romans this intellectual and artistic aristocracy, while not attaining quite the same prestige, exists alongside the ruling aristocracy. However, the Hellenic conception was modified; in Rome caste resumed its full power; patricians and plebeians were required by law to maintain the relation of superior and inferior.

From this point it seems as though we were returning upon our steps. The barbarian invasions restored the entire power of brute force and of cunning force. In the train of a chief galloped unorganized troops, and power of muscle alone establishes a hierarchy in the mob that follows Attila. Yet, in truth, the intellectual aristocracy was not dead; it was wretched and persecuted. In Byzantium it appears, emotional and confused. On the banks of the Bosphorus Greek metaphysics mingled with naissant Christianity and with Oriental superstitions. While the emperor, the victorious soldier, owes his throne to his force, he trembles before the religious factions which were led by individuals in a state of exaltation and intoxicated with ideas.

In the Occident when the barbarians plan to profit by their victory we see an intellectual aristocracy arise; the papacy is organized. The church, and the monasteries especially, with their monks constantly bending over manuscripts brought from the Levant and filled with the knowledge of Greek philosophy, of Aristotle and Plato, cultivate and direct the thoughts of men. And thus we have a new development—two ruling classes organizing side by side: a military and an intellectual aristocracy.

But the second of these is no longer a national élite. It has

a tendency to become a cosmopolitan aristocracy. Its power increases daily. Consider the Crusades. Here a few dreamers carry the military élite off their feet and for a time dominate force and use it for their own ends.

Next, alongside these two bodies of ruling élite—the already international church and the military nobility—there appear once more dissenting and independent élite. As in Greece, poets, philosophers, artists contribute to human development. The renaissance spreads over Italy and France. But this third élite seems to be in vassalage to the other two. The church, if it does not absorb it, is flatly hostile to it. Luther and Calvin, the reformers, are individuals who enter into conflict with the reigning intellectual élite, just as the latter in its day had combatted the military élite. The Reformation conquers a part of Europe. As happens in all such cases, its leaders labor to secure organization. The ruling intellectual élite is divided. The Catholic Church remains international. The reformed church is factional, is national, and these two powers alike oppress the individual. The Spanish inquisition scarcely surpasses the pastors of Geneva in intolerance. Michael Servetus, the revolutionary pantheist, is burned at the stake.

Nevertheless the labors of independent individuals go on. A fourth élite is created, or rather the élite consisting of artists and philosophers before the Reformation continues its task, aided and often encouraged by the monarchs.<sup>1</sup> It was individuals independent of all organizations who prepared the way for the French Revolution. Before this is launched we note indeed a certain number of secret societies with more or less power, which afford to these isolated individuals the opportunity to exchange views, but we think that the importance of these fraternities should not be exaggerated. The achievement of a Voltaire, of a Rousseau, was in our opinion more important than the, to be sure, interesting ac-

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<sup>1</sup>We shall examine later the part played by monarchs in relation to élite individuals. A Louis XIV., a Frederick the Great constituted, through their desire to be surrounded by men of genius, admirable unorganized élites, and thus did more for progress than the members of contemporary democracies have perhaps done hitherto.



tivity of Free Masonry. In fact, the latter will pretty nearly represent the efforts of these free individuals to transfer their conceptions from the field of abstract ideas to the domain of facts. Once again, as in the time of the Crusades and of the Reformation, the labor of individuals animates an organized, intellectual élite, which in its turn, utilizes brute or cunning force, or, in short, the military élite. After the downfall of Napoleon I, despite the power of the "congregation," the élite which really called forth the events of 1789 did not disappear. It was merely resolved into its elements. Thus it again became potent. Never were ideologists so plentiful. Economists begin to propound social problems. The coming of democracy is at hand. It is ever the same phenomenon repeated—the isolated individual of an unorganized intellectual élite prepares the way for a social revolution, and the formation of new, organized, intellectual élites; that is to say, of élites which apply themselves directly to transforming the thought of the masses in order to make use of the force of the masses.

To-day this social revolution has been accomplished in France in some measure. Before proceeding to the study of contemporary governments let us make note of the fact that we have observed constantly in this rapid survey that human evolution is guided by individuals. No sooner is an association formed to impose a new conception upon the populace than other superior individuals go to work, and it is their labor that prepares the way for the future. All the great scientific discoveries, all the great religious, metaphysical and social ideas are the work of individuals.

But there are those who claim that these individuals are, on the contrary, merely the echo of organized groups, the representatives of the universal knowledge of their day. To which it may be replied: If Lamarck and Newton, for instance, profited by this knowledge it was surely in themselves and because of their mysterious genius—mysterious, I repeat, for what do we know of the origin of genius?—that the synthesis was accomplished of all the elements which were furnished to them (this we freely admit) by organized élites.

Now they derived from this synthesis new conclusions, which

were not always accepted by those very persons to whom these constructive heroes owed the elementary materials of their structures. So that, if the élite individuals are the echoes of the learned multitude, we would say that they give back to this multitude their voice so transformed that they themselves do not recognize it. And this transformation, which is the peculiar work of isolated individuals, is the very kernel of progress.

It is therefore necessary, first of all and even solely, to secure to each individual his particular and especial development.

## II.

The French Revolution, or at least those who prepared the way for it, seem to have recognized the value of this thought. They proclaimed the equal right of each to develop unhampered; but at the same moment in which they summoned all the masses to their share in life they found themselves face to face with a new question, the question of the relations of these equal individuals, who wished not only to live, but to individualize themselves still more, to dominate, to conquer. In order to satisfy these energies and these ambitions they attempted in theory equitably to distribute honors as well as offices; they distributed the spoils of victory to the greatest possible number, and since they were forced to retain the social categories it was demanded that they be open broadly to all citizens. Better still, they demanded that, from top to bottom of the social scale, in whatsoever category, each unit should represent other units, for to *represent* was to conquer and to control a portion of the power which governed the state. The unanimous desire to give to all the elements of the populace the impression of victory explains the creation of these representative élites, which took the place of the older organized élites, whether intellectual or military, which we shall call *fixed* élites, in contrast with the newer élites, which are essentially *variable*.

In the constitution of the variable élites of the Revolution no account was made of heredity, nor of the environment in which the individual had grown up. The principle had been propounded that

the free exertions of the units of the nation would tend naturally to realize the common ideal. The intent of every citizen should be, and they did not doubt that it would be, to improve the condition of his fellows. The fact of representing a group of men animated by this specific virtue became a new force, a new value, as Nietzsche would say. In order, therefore, to appreciate an individual, two criteria were used: He was *himself*, and he *represented others*—he had a qualitative value and a quantitative value.

But very soon the quantitative element outweighed the qualitative in the judgment of the masses, as a result of this naïve axiom; all citizens are animated by an equal love for the common ideal. Accordingly, the common ideal is the only thing that counts. Thus the qualitative element is no longer estimated excepting by its relation to the quantitative element; the moral qualities of a man, his physical or his intellectual force, are recognized only in so far as they are imposed upon other men, win their suffrages and hold the favor of the masses for a greater or less period of time.

In order to win the favor of these masses, to obtain this quantitative value, the tribunes of the Revolution tried all the ancient means of conquest. Brute force, cunning, audacity and prudence, which are only the art of employing force, were used in succession. But these ancient devices were now supported by others. A delegate had no existence unless he was sustained by an initial group, and therefore it was necessary for him to remain in contact with this group. He was obliged to please those to whom he owed his power, and he pleased them so long as he could hear their voice speaking within him, so long as he was their faithful echo. . . . Frightened by the fear of falling from favor this delegate found his field of action restricted, and he dared not overstep the limits or the "middle ground" in which centered the aspirations of his electors. And this "middle ground" was of necessity narrow, unless perchance the delegate appealed to the feelings most deeply rooted in the hearts of all men, to those primitive instincts which civilization had tried to suppress.

The victors of the variable élite of 1789 unloosed hatred, fury

and envy, not from preference, perhaps, but in order to broaden the field of action in which they wished to manifest themselves.

To be skillful in discovering the passions which stir the greatest number, to be adept in appealing to these passions, in shaping them to any use whatever, to be able to become the echo of a tumult while controlling it, in fine, to be able to assimilate oneself to the multitude, and at the same time remain oneself. Such were the qualities indispensable in these tribunes.

For a century now they have been endeavoring to instruct the multitude, to give them a common ideal which should be at the same time more complex and more noble, and the results obtained deserve to be examined with care. We shall return to this point. For the present we shall insist only upon this:

There are those who declare that the intellectual level of the masses is rising constantly through the action of its élite representatives. We believe this to be false. We believe that all the actual progress accomplished in the century past was such, owing, not to élite representatives, who were constrained, on penalty of suddenly losing their power, to avoid offending the deep feelings and the master instincts of the groups which they represented—not to élites whose intellectual level was established by the intellectual level of the multitude—but rather owing to the labor of superior individuals, who were united by no organization and whose qualitative value was not devoted to being transformed into a quantitative value.

Now, whatever be the instruction given to the multitude, only he can become a member of the governing élite, even now, whose power humiliates itself to the point of accepting as its criterium the number of expressions of admiration which it arouses.

### III.

What actually becomes in modern society of these superior and solitary individuals? Formerly the victor by force among the first human families had only to struggle against other more or less robust individuals—not, however, united among themselves. The

power of this victor vanished as soon as the vanquished united when collective power was born. And the individual who has conquered hitherto by his intelligence will succumb also when he is obliged to oppose the combined intelligences of the nation. And they will surely combine against him, against his initiative, for, we repeat, the multitude can unite only for the purpose of compelling the acceptance of average ideas, of ideas already accepted by the majority of citizens.

The kingdom or the empire, despite all the criticisms directed at these institutions, were certainly more favorable to the development of these individual heroes. Whether they were already members of a caste that was elevated by law or by birth, or whether they were victorious by virtue of their nature or their intelligence, they did not have to concern themselves about an omnipotent public opinion. It is true they had to combat the prejudices of the already existing social groups. But these groups had to reckon with their own comparative isolation, and thus presented a less imposing surface of resistance than the universal coalition of average minds. Recall here, moreover, what was said at the beginning of this article—the feeling of social solidarity has penetrated even the hearts of men who have reached the highest eminences. In the name of this sentiment they judge the value of their own work according as it is, or is not, directly serviceable to humanity, and humanity responds to them by the voice of its elect, whom they call deputies, senators, ministers, members of universities and academies, and they concede the validity of this response.

The multitude has become the sovereign judge of all activities, and few there be that protest against its decisions. Through this omnipotence, which it uses for the purpose of leveling, democracy is more oppressive toward the true intellectual élite than any monarch or any religious caste that ever existed.

And if we turn now to those other élite individuals, military or political leaders, we see that the same reasoning retains all its force. Only within the brain of a single individual is the synthesis accomplished whence may spring a new deduction. Most, if not all, laws and reforms were conceived by individuals acting independently;

that is to say, acting without any concern for public opinion, without asking the multitude for its immediate approbation. And this is why, however inauspicious be the accession of a tyrant to the throne, it seems to us to be compensated and more than compensated by the accession of a genius. We confess ourselves to be the opponents of a single power, of that power which, resting upon the consent of average minds, seems to us to be committed either to inaction or to the rôle of panderer to the lowest of human passions.

The man of genius, when called to govern the people by the will of all, is obliged to restrain his initiative lest he lose the favor of all. The man of genius, who governs by right of birth, or who depends upon the good pleasure of a king, or again, who governs by right of conquest, enjoys a freedom extraordinarily wider. If hereditary sovereign of a country, he derives his fortune from the traditions and the memories of the past. These memories impose a certain general direction upon his acts, but do not at all prevent him from developing himself in this direction.

If he is minister of a king he has but to satisfy this monarch. And who will claim that it is less easy to mould the mind of an individual than the mind of a mob?

Finally, if he rules by right of conquest, he enjoys absolute liberty. His power depends upon memories which connect directly with previous manifestations of his power. He will increase it by developing his own powers logically; the limits within which he can move are precisely those which are adapted to him. Consider the enormous work accomplished by all founders of dynasties. They begin by destroying; they end by constructing. All human progress, if we admit that there is such a thing as progress, is but the succession of these two functions. Democracies are opposed to them both alike. As soon as they are in the saddle they no longer permit destruction, and they fear new constructions, or at least every construction that would rise above the common level where they stagnate. The majority of the legislators of France regard the constitution which controls their country as detestable. And yet they dare not lay hands upon it, and we doubt whether a



deputy, even had he genius, and the greatest genius, could succeed in getting his colleagues to vote for a constitution which would not, all in all, satisfy the present passions of the multitude. Now, these passions would destroy the ideal harmony of democrats. A perfect democracy seems almost committed to immobility.

Thus would the *élite* individual, who might by chance belong to a representative group, find his activity restricted. And yet, our contemporaries, in a certain measure, recognize that heroes are indispensable to them. They commend, as though it were a new religion, the worship of great men; we permit them to control us—when the marble of their statues makes them incapable of action.

#### IV.

And, nevertheless, these frantic agents of social leveling, these representatives of the masses, the members of the variable *élites*, are subject still to the influence of the fixed *élites*, constituted of old in accordance with the ancient criteria of force and heredity.

In our contemporary democracies the possessors of inherited power, be it the power of gold or that which gives the prestige of memories to one who bears a famous name—these, uniting, drawn together by a common regard for a certain elegance, constitute groups within which the pride of being able to accomplish more than someone else, thanks to capital, and the pride of being able to claim the past, compel the individual not to consider himself merely a social "unit." The sons of wealthy men, the descendants of ancient noble castes, even the sons of representatives of the people, are conscious of possessing an ancient power, accumulated in them and differentiating them from other men. This consciousness is increased by the relations which they maintain with the cosmopolitan *élite*, consisting of individuals who certainly do not lack vigor, since they bear transplanting without perishing—removal from their social environment, traveling aristocrats, who, becoming the guests of a democratic people, import the mode of thought of races in which other tendencies predominate. In the

midst of such extremely complex environments we meet with another variety of conqueror; no longer the sons of the rich, but the "new men," men who have grown rich by their boldness or their energy

This aggregation of such diverse materials constitutes a superior class in the nation, a class which the representative élites admire and detest, assail and imitate. And how can it be otherwise? The elect of a group, aside from his social existence, is subject to human passions. Even if he remains merely the representative of his electors, when he exercises his governing functions, yet he is not always governing. The psychology of his private life has been written many times. We shall attempt to reconstruct it in another essay. It is crammed full of ambitions. Ambition urged him to solicit suffrages. It spurs him to raise himself into a region where power is less ephemeral, less uncertain. He wishes to demonstrate to himself that he possesses a qualitative value and not only merely the quantitative value given by his certificate of election.

Dazzling luxury and the brutal power of financiers hypnotize him. He worships a Lesseps before crushing him; he marvels at the genius of a Morgan or a Rockefeller before creating a law against trusts. He perceives that there is another glory than that which social units have bestowed on him. The rights of the great number are constantly isolated in his mind by the vigor of a single man; he must admit that the majority of the great industrial achievements are conceived in our day by individuals. And he is dazzled not only by the conquerors of wealth, but also, and perhaps even more, by those traditional castes which he has brought low and the remains of which persist in despising him. He would like to admire these castes, as a dilettante, just as he admires, though a rationalist, the manifestations of Christian art with which the museums are filled. But lo! he finds himself copying the morals, the exterior attitudes of these "fossils," of those whom he regards as fossils. If he is a politician, a member of the university or the academy, he will be caught by the fine sound of the famous name which adds to the prestige of this or that deputy or

scholar, or artist, the son of some well-known personage. The strangers also whom he meets in the embassies or the cosmopolitan salons, force upon him a certain respect for titles, for decorations, for all the symbols which distinguish men in the name of the past and in the name of heredity.

These fixed élites and these other élites which are at the same time fixed and variable, constituted by the rich, may then teach him to see in a man something else than a fragment of the mass.

. . . It would be thus, perhaps, if he hoped to maintain himself in this privileged class without the support of his electors, but he knows too well that his position in the world depends upon them. The lesson that he learns by his transient sojourn among the survivors of ancient régimes is that outward organization is necessary, such as that maintained among the ancient régimes, to oppose them successfully. He joins the Free Masons; he is Grand Master of the Temple; he aspires to the red ribbon of the Legion of Honor. The pomp of Catholicism and the mysteries of the church arouse in him the thought of establishing similar ceremonies in which to shine and similar mysteries from which to derive an aureole for himself. He speaks of the religion of democracy and of its dogmas. He dreams of priests for this religion, and perhaps he fancies also that the dogmas would be better served by the scions of the distinguished representatives of the people.

And still better, since financiers have frightened and seduced him, he demands that private fortunes be subject to the control of the representative élite; he wishes ministers and members of parliamentary committees—in a word, the state—to be sole judge of the future of industrial affairs, to be free to permit or prevent development. He aspires to become a priest, a noble, a great financier. When he is not making laws this chosen one is planning to prove that his quantitative value is the guaranty of his qualitative value. He hopes that the fact of representing a great number of individuals will before long be equal to a brevet of omniscience. And he anticipates the future. He realizes his hopes by means of his decrees and his laws.

Decrees and laws ordain that he shall be a member of the élite.

## V.

In truth, our fondness for sociology, this science which sees in men only fragments of a mass, interferes too much with our considering the man himself, the springs of his action, the feelings which cause him to love life for life's sake, and to love science in general, not *your* science.

A century has passed since the Revolution broke the ancient molds in order to permit all citizens to develop freely, and never was the individual who wished to develop freely more trammelled than in our day in his struggles for independence. Never was he more swallowed up in the mass. He constitutes a part of an "amorphous whole"—Society. He possesses rights only in so far as his rights do not embarrass society. He possesses no other power but that devolved upon each social unit—of naming the representative élite. As soon as he has exercised this power he becomes a subordinate wheel in a formidable machine. And even his representative, his delegate, is only a unit of another multitude, which, while commissioned to rule everything, to regulate everything in the name of society, merely devotes itself to trying to establish social *harmony*. To this harmony these beings sacrifice the originality of themselves and of others. They decree that the best morality is that which secures the good operation of the institutions which they govern. They direct us to act in such a manner that our actions will not disturb the order which they have declared necessary to the welfare of the state. They expect to prepare for the future by regulating the emotions of our children by giving them such philosophic instruction as they themselves have chosen. They teach them the code, they mould their doubts, they select their regrets and direct their enthusiasms. And all this, once more, they accomplish by laboring solely to facilitate the mutual *relations* of men.

These relations alone absorb attention. They put oil upon the wheels and do not perceive that these wheels operate because a higher power impels them. They have never turned their eyes toward this power. They do not feel it in themselves. In the motors

of to-day the oilers are automatic. They too are parts of the mechanism. It is the same with the chosen representatives of our modern élites. They consider themselves as wheels, as units of the mass.

And they cannot consider themselves otherwise. Their abnegation is natural. Are they not the results of human groups. And are not these groups brought together by the self-denial of each one for the sake of the common interests? The elector has sacrificed his individuality, of his own free will, thanks to the education which society has given him, he has regarded it as soft wax, capable of melting and mingling in a larger mass. Thus he sets an example for his representative; the only power that devolves upon him is used, not independently, but in submission to the discipline of a party, a school, a system, a scientific or political church. He has not chosen the delegate who will best express his personal and individual aspirations, but the delegate who could be chosen also by those units of the mass whom he himself most resembles. He voluntarily obliterates himself in a joint-stock multitude. We shall meet this multitude again in all the social categories, in all classes. It is constantly inferior to the individuals who compose it. Whether we are dealing with a parliament or an academy, it is always dominated by the one of its members who represents the most "values." In order to represent values in a multitude one must be able to bend to its demands at the very time when one would like to impose a new conception upon it, must be able to sacrifice to it a portion of oneself, and since the members of the representative élite make this sacrifice—in fact, the most important of all—in order to mass social units behind their own ambition, why wonder when they endeavor to impose upon their contemporaries and on future generations a uniform mode of thought? They wish to govern beings who will get together easily, and this is why they teach the people uniform morals, official science, and persuade them little by little that the sole duty of an individual consists in solidarity with the rest of mankind, in making the mutual relations of men more easy and agreeable.

They are logical with themselves, these people, who, in the

governing assembly, are forced to shape themselves after the image of their party, when they try to compel the nation also to model itself upon a single type, and they are logical, furthermore, when they declare that the nearer an individual approaches this type, the more worthy he is to take his seat among them and share in their glory.

But this typical individual, being the creation of a majority which is of necessity forbidden to neglect a single one of its members, can be in his turn only an average individual as compared with the members of this majority. However, the entire present social organization is laboring to produce this mediocre being. The university and the government are alike working to this end.

## VI.

As soon as he has left his family the pupil learns to submit to the exigencies of programs. He is subjected to masters who themselves are amenable to the decrees of the minister of education, and the minister remains in power only on condition that he show a common purpose with parliament. The social edifice rests with its entire weight upon the originality of the child's mind.

Programs of study guide him to the secondary examinations. The pupil must obtain the "satisfecit" of the managing élite if he wishes to profit by the learning he has already acquired. And now we come to the competitive examinations. We are attempting to discover the best in this gathering of candidates. The best? Those whose originality will jar least the majority of the judges. And thus selection works from one competition to another. Having reached the end of his official instruction, the young man, if, indeed, he is still young, has so devoted himself to avoiding offense to any of his masters by his own initiative that he cannot even recall his early enthusiasms. He is cowed and muzzled. Have no further fear lest he rebel against official learning.

Consider that in order to become doctor or surgeon in the hospitals of Paris the candidate is undergoing competitive examinations



from the age of twenty to that of thirty-five. He must satisfy the jury of day treatment and the jury of house treatment, and if he aims to become a surgeon he must be satisfactory to the jury or adjuvants, then to the jury on prosectors, then to the three professors, who will nominate him for assistant chief of some clinique, later chief of this clinique, and finally he will become physician or surgeon at the central office before he can be chosen incumbent of a regular practice.

We know very well that nepotism intervenes and falsifies the results of this series of tests. Certain savants make the task easy to their pupils, and thus succeed in creating a class of superior individuals. But nepotism is regarded as a plague by democracies, and very justly, for while it is profitable in the case we have just cited, it manifests itself frequently in another form: The governing élite, properly so called, the political representatives of the people, bring pressure to bear upon the verdict of the judges, and thus again we meet the confusion between qualitative and quantitative values. Is it not the administration of Public Assistance which appoints as regular incumbent of a practice the physician from the central office?

We have taken as an example medical studies in Paris, but the same criticism applies to all the academies.

While the university is charged with watching over the classification of minds, the government is charged with regulating the relations of social units with one another and with the state.

The average commonplace individual rules in the government—what an absurdity! What a crushing series of wheels! If an official proposes a reform it simply cannot receive consideration until it has been indorsed as necessary by sub-chiefs and chiefs of bureaus, by sub-prefects and prefects, by chiefs of division, by commissions, by the minister's cabinet and the minister himself, and by Parliament.

Every new and original idea, whether belonging to the intellectual realm or touching the organization of the state, must therefore overcome innumerable obstacles before it can be put into execution. Scholars, professors and officials are not ignorant of this fact. They devote themselves solely to the search for what will please the greatest number. To be unlike other people reduces the chances of

success. They develop in themselves not merely the spirit of discipline, but that mediocrity which they must attain in order to succeed.

## VII.

In the hands of these slaves of democracy, whose brains are like those of Chinese mandarins, and, we believe, of an equally sterile beauty, the masses themselves are constantly oppressed. In the name of their own welfare they are subjected to an intolerable hygiene. Hygiene? The word is very fitting. For have we not invented social pathology?

Yes, society would seem to be like a human organism. In the railways we have the arteries of this unique body; the farmers and workingmen are the cells of the muscles; the government is the brain, or perhaps the heart; the succession of representative élites seems to correspond to a nervous system with its ganglions and brain centers.

Take note that this organism must aim at one single object—to keep in good order. If it is ill it must be cured. If it is not ill we are in fear lest it become so. Close the window in the evening when the air is pleasant to breathe. The dream which you are following along the vault of heaven, and which grows as the light diminishes, will perhaps make you happy—but look out for that awful bronchitis.

Have you ever known the unfortunate man who, being all plastered over with neurasthenia, surrenders himself to twenty doctors, nurses at one and the same time his stomach, his kidneys, his bladder and his lungs, takes his reactions and weighs out the rations of his diet? He is fearful of emotions which may accelerate his heart action. He remains motionless save when he is promenading methodically, watch in hand, in order to obey the rules of hygiene. He is devoting himself with desperation to the equilibrium between the functions of his organs. Their individual gratification is a matter of indifference to him. He even forbids them any pleasure which would excite them individually. Does he ever imbibe alcohol? Does he ever indulge in highly seasoned food? No

mistress claims his devotion. And if by chance his brain becomes excited, quick! a bromide will calm the imprudent organ. The brain must care only for the fulfillment of its daily duty, and this duty is to remain in good health. This man exists only to keep from dying. His mental life consists only of a precise picture of the mutual relations of his organs.

And such will be the mental life of a society which regards itself as being like a human organism and concentrates its attention upon hygiene. Melancholy ideal!

But let us turn from this comparison. There is no evidence that it is correct, and if it should become so we should be horrified at the result. For the present at least the individual is something more than the cell of an organism, and the farther removed he is from this degradation the more he suffers from the oppression which society imposes upon him.

In order that his voice may be heard he must ally himself with others like him. But what if he do not find his like? The mob begins to cross-question him and is offended. He is hindering the movements of the passers-by, those regular and precise movements which are the glory of social harmony. All the territory in the streets, the city, the fields and even on the hills has been surveyed. The earth is peopled with automatons who follow with empty gaze their daily tasks. And the independent individual stands still and turns his eyes inward and proposes to develop within his own self in accordance with his beliefs. But they elbow him and drive him away. He is dreaming, the vagabond; well, then, let him write down his dreams. Society is now calling for the analytical drama; to-morrow it will be the drama of chivalry. He is crowded toward the theater, toward the libraries. He must choose. And if he wishes to study here are laboratories, but he must first prove that he has a useful knowledge. Alas! he knows nothing. He is dreaming for his own amusement. He is dreaming to be happy. Is he crazy? Here we dream only to fulfill a social duty, to appease or excite or instruct the masses. He flees. He seeks the neighboring mountain. He climbs into ancient solitudes. They are closely watched. No one is permitted to penetrate them without public

authority. They lead him away. Crazy in fact. They take him to an asylum. And there he will live, among real fools, intoxicating himself, in order not to die too soon, with the memory of the old emotions of other days. And now when he dies, trembling with impotent fever, listen to his cry of protest against the ideology of his contemporaries, against all these systems, all these reasonings, all these remedies. The doctors of the people have cured them of their originality and simplicity. In the name of grandiose conceptions, whose scope they never understood and scarcely the material value the doctors have slain their simple philosophy. Yet it was all they needed to guide them in tilling their gardens and breathing there the perfumes of eternity. He dies. Around him the automatons, *sans* grief and *sans* joy, pursue the play of their cadenced movements. But the time will come when the initial force will be exhausted and the automatons will stop, will coagulate, will die themselves, absorbed at last into a motionless humanity.

#### VIII.

Melancholy ideal! But what other can be suggested, and shall we have the boldness to suggest another? We must have that boldness if we are not to belie our convictions. Yes, we believe that we must clash with society.

While all efforts are being absorbed in furthering the triumphal march of the state, we are forgetting that social life is perpetuated only by conflicts. We ourselves exist by virtue of these conflicts. Let us go still further: It is conflicts that bring us the most agreeable relations with society, and not respect for law. Social life furnishes us merely garments for our disguise, and we are expected to learn to mask our mode of seeing and feeling, despite the grand and eternal initial force, the ego, the imaginary or real individuality that dwells within each one!

Oh, let us cease to give first place to the question of the relation of the units of society! Let political economy and sociology keep their place, which is by no means the foremost among the sciences indispensable to man. The material well-being which they are so

much concerned with distributing to us equally is not sufficient. It is the oil which lubricates the wheels of the machine, but not the fuel that makes the wheels go round. And this fuel, this mysterious energy, is furnished neither by economists nor by sociologists, nor by the mediocre representative élites of our present-day democracies. Let not the present age be reproached for the one that preceded the French revolution! That was the time when everybody wanted freedom of individual development, and freedom is a fair Utopia, which means precisely the independence of the "ego." The organization that is held up to us as a new religion restricts the liberty of each in behalf of the liberty of all. It is the very negation of this "ego," of this grand source of life, of this sole atrium, whence the individual may constantly derive new vigor.

And if it is impossible to-day to suppress these representative élites, these agencies of leveling, these factors of individual weakness, let us at least labor to make them better by diminishing their power, by tolerating alongside of them élite individuals, by trying in all possible ways to increase the number of these élite individuals, these heroes whose activity is not regulated by the needs of the state nor by the concerns of the passing hour.

In the society which our economists and sociologists are busy creating the demi-gods will probably be regarded as faulty wheels, as too noisy wheels, disturbers of political harmony. Those who are named Galileo, or Newton, Lavoisier or Kepler, Spinoza or Shakespeare, Descartes, Montaigne, Racine, Pascal, Goethe, Schopenhauer or Nietzsche do not produce works for the man who restricts his rôle in life to being one unit in the multitude, nor for the one whose aims and emotions are created solely by the desire to evolve in this multitude without offending anyone else. They produce works that give to life the savor of a divine fruit. They increase our consciousness; they rouse those who have fallen into the sleep of indifference; our dead arise at the sound of their voices. They stir our ashes and transfuse them with life; they fill our poor existence with suggestions of a thousand other possible existences, for which our hearts throb. They are the deep and shifting mirror of the centuries past. They create resting places of the soul in

order to soar in pursuit of dreams. They force back the boundaries of the unknowable to intoxicate us with a still greater mystery. They raise us above common mortality. They guide us toward the peaks where the thorns of morality no longer grow, where one no longer feels the weight of the laws which govern the relations of equal individuals, but where the breezes of the summits are warmed by the bare rocks and intoxicate and exalt us. They cause each one of us to find the world within himself and to glow with enthusiasm when he becomes aware of it. But they do all this to arouse their own enthusiasm, to mount still higher, and not to condescend to us.

In sooth, they would disturb the perfect hygiene of an harmonious society. But what of that? Nietzsche was diseased. Let us not excite the reactions of this genius! His direct influence upon his contemporaries has been opposed to morality, and every day we are shocked by the follies that are done in his name. But what of it? He gave us his heart for food. What does it impart against the glory of Goethe that Werther led several hundreds of young people to suicide? And yet our democracies will be logical if they complain of Nietzsche and Goethe. And how quickly they will send to the dungeon this King Ludwig II of Bavaria, who lived amid the paraphernalia of a perpetual ecstasy; this madman, who watched over the birth of Wagner's tetralogy and who forces us to think. And Verlaine, and Villiers de l'Isle-Adam, and Poe, the dipsomaniac. For the fact is that all these fellows, these diseased beings, irritate intolerably the brain of the masses and might impart to some of them the desire to grow.

And how will the society that we would pave the way for deal with such men? Would not Hugo in his age burst the narrow bounds of a phalanstery?

Ah, well! we must create men who burst the bounds of phalansteries; but to bring this about we must struggle with ourselves; we must repeat to ourselves constantly that we must never lower ourselves to the mob, that body whose sole function should be to nourish individuals by consuming itself—that the multitude has not the right, even through the medium of its representative élite, to judge élite individuals; that we need to exalt ourselves for ourselves; that



even the average individual must find in himself the force of living, the fuel of his own energy; that he will find this sustenance in himself alone and not in that rhythmic organization where all the data are lacking. We must cry aloud that the élite individual must rise without concerning himself about the opinion of his contemporaries.

Whoever rises, though solitary, toward an ideal labors better for mankind than the tribune who concerns himself about all mankind.

Yes, we hate tight-rope dancers. We are disciples of Nietzsche, presumptuous and beside ourselves. But more mad than Nietzsche himself, for if we were creating a Zarathustra he would not descend to the mob to address it. He would write his book slowly, in his solitude, and forgetting it upon the peak where he was dreaming, he would be unconcerned, for he would know that no force is ever lost that has once manifested itself powerfully, and he would have confidence. Some passer-by would find his book when the time for it was fulfilled.

But behold! We have combined to write these studies. Oh, the melancholy symbol! Who was it that said that it would soon be impossible for a single brain to accomplish the synthesis of the universe? We make no claim of doing it, and yet we have combined. In this association may at least no particle of our two personalities be lost! We do not unite them to bring them toward a commonplace ideal. One shall be added to the other, and if some confusion results, better this confusion, these conflicts, than any most perfect regulation, which should make our discussion mediocre and commonplace!

N. VASCHIDE.

G. BINET-VALMER.

PARIS, FRANCE.

## CRITICISMS AND DISCUSSIONS.

### A REVIEW OF DR. CARUS' "FUNDAMENTAL PROBLEMS" AND "THE SURD OF METAPHYSICS."<sup>1</sup>

THESE two volumes may be presumed to give a fairly satisfactory account of Dr. Carus' philosophy. His writings are voluminous, but it is fair to assume that his other books are either an explication or an application of the philosophical principles here set forth. And this assumption is justified in that the former of these two volumes purports to be and actually is a careful treatise upon the great themes of philosophy, while the latter, although directed to a specific point in metaphysical inquiry, serves to present more fully and clearly the author's views upon the fundamental questions involved; so that we have here, in a nutshell, the Philosophy of *The Open Court*. This is notwithstanding what is told us in the Preface to the *Fundamental Problems*, namely, that nearly the whole of its contents first appeared as editorial articles in *The Open Court*. A glance at the Table of Contents reveals not only a general connection between the essays, but also a substantial identity of theme and even a logical consecutiveness and harmony in the treatment of it.

The author is a man of no merely amateur accomplishments in the arena of dialectical thought and discussion. He has convictions of his own and he is not wanting in courage or ability to enforce them. He disclaims originality or, more accurately, he affirms his endeavor to avoid it. In this, whatever his own modesty may lead him to declare, it will hardly be unjust to charge him with some measure of failure.

It may be more surprising to the savants of the opening century that a new and somewhat original philosophy should come out of the utilitarian and Mammon-worshiping city of Chicago than it was to them of old time that any good thing should come out of Nazareth; but in both instances the thing which surprises is the thing that comes to pass. Dr. Paul Carus is the brilliant author and persistent proponent of this new philosophy. It is neither possible nor desirable to set forth in full its postulates and principles

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<sup>1</sup> *The Princeton Theological Review*. MacCalla & Company, Philadelphia.

in this review, and yet, as all theology banks up against philosophy, and as this system—in so far true to the philosophical instinct and necessity—explicitly invades the realm of religious thought and ethical motive, we may examine the elements of this American positivism for the sake of its placement in the general scheme of modern philosophical encyclopædia, and of learning what are not only its alleged but also its logical and implicit bearings upon the intellectual elements of the Christian religion.

Dr. Carus conceives the problem of philosophy to be "the arrangement of all knowledge into one harmonious system which will be a unitary conception of the world and can serve as a basis for ethics" (i, 7).<sup>1</sup> He admits that his Monism differs from other philosophies in this, that it "is not a finished system but a plan for a system" (i, 24). The unitary conception is the goal of philosophy. This conception presupposes the idea of the continuity of nature which, however, he significantly says, "has not yet been proved in all its details" (i, 7). This unity of Reality must be unqualifiedly accepted. It is true in thought because it is true in fact. This conception is grounded on positive facts, and therefore the system is called "Positivism"—a term which, although he adopts it, he cannot accept with the connotation of M. Auguste Comte, who introduced it. Facts are ultimates; they are equally real or equally unreal. "Monism" also designates this philosophy of the unitary conception. But this Monism is not a "one substance theory;" Spinoza's doctrine was a pseudo-Monism, a "Henism." The author is Hegelian enough to tell us that Monism is a "recognition of dualities and their reconciliation in higher unities" (ii, 76, 77). Idealism affirms spirit only and Realism affirms matter only, whereas in truth both spirit and matter are mere abstracts and neither exists. True Monism recognizes the oneness of All-Existence. There are no differences of kind in this One; no Creator and created, no supernatural and natural, no divine and human. God and the universe are One. All nature is alive. Haeckel says that all nature has intelligence; this is "panpsychism." Carus says all nature is alive or has the capacity to live; this is "panbiotism" (ii, 170). Life is an immanent property of matter. There is organic life and inorganic life; the former no doubt originated in the latter. But the barrier between them has been broken down by modern thought, and life is now recognized as a fundamental property of matter; indeed, "it must be eternal" (i, 111). Reality is indivisible; the most important abstracts are matter, force and form—these three, but the greatest of these is form.

Epistemologically stated, all knowledge has its root in sensation and sensation is primarily feeling and not choice, as Professor Romanes believed. Feeling is fundamental and the *rationale* of feeling is purely biological. In

<sup>1</sup>For convenience in reference, I indicate the first volume named at the beginning as volume i and the second as volume ii.

the development of knowledge from feeling the conditioning factor is memory, and this memory is nothing more than the psychological aspect of certain preserved physiological forms in sentient substance (i, 12). Constant special irritation has created special senses; the unity of consciousness is the product of the whole organism and the soul is not an entity; it is not a separate or separable independent something; it is only "the psychical aspect of all the organic forms of our body" (i, 14). The old ego-centric psychology is abandoned and the new is accepted, which regards "the center of consciousness as the strongest feeling at a given time which as such naturally predominates over and eclipses the other feelings of the organism" (ii, 195).

Metaphysically stated, the ultimate category of thought is to be found in the laws of form. These are eternal, irrefragable and everywhere the same. They are always "*correct*, i. e., the truths of formal thought, but they are not always *real*, i. e., the truths of a well-ascertained experience" (i, 69). The real is not a necessary existence; but if it do exist, then it must exist in accordance with these laws of form. The ultimate of thought is not any thing-in-itself, but forms-in-themselves.

Kant nodded in overlooking the essential difference between the subjective and the ideal, and the consequent confusion weakens the very foundations of his system. The ideal belongs to the realm of ideas and is therefore metaphysically eternal; the subjective belongs only to the realm of the thinking or feeling agent, and is therefore psychologically variable. Kant distinguishes between the *a priori* and the *a posteriori* correctly enough, but he attributes the former only to subjectivity; and, whereas he erroneously makes the subjective equivalent to the ideal, the truth is that the infinitely important part of the subjective of Kant, namely, the ideal as correctly conceived, is preëminently, if not exclusively, entitled to the honors of the *a priori*. For, indeed, from the evolutionistic and Monistic point of view the subjective is really not *a priori* in any correct sense at all, seeing that it pertains simply to the perceiving or the conceiving subject; and to us men this subject, this soul or mind or ego or what-not, is only a fragment or moment of the Great All-One. Man, like charcoal, is simply "transformed solar heat;" and "mind is not something different from the world, but must be considered as its product and highest efflorescence" (ii, 22). Hence Kant was wrong in regarding the mind as able actively to import forms into phenomena; these mind-forms or categories of thought are only a reflection of the forms of objective existence, preserved in the plastic but ceaselessly crystallizing sentient substance. The subjective *a priori* is liable to all the mutations and fluctuations of a psychological experience; the ideal *a priori*, which is Dr. Carus' *a priori*, resides in these eternal, imperial, immanent and even "supernatural" (ii, 87) laws of form.

So much may serve imperfectly to give to one unfamiliar with this philosophy a rough but true conception of its teachings and tendencies. Its author argues for its truth very earnestly and sometimes with much force. In the course of his arguments he says many things which are both excellent and true, but we are now dealing, not with detached thoughts in his system, but with the system itself.

Dr. Carus frankly acknowledges his indebtedness to Kant. He regards his own position as the natural outcome of the critical philosophy, but not without very important differences. He calls it Kantism developed, broadened, matured and adapted to our time. "It is a protest against the halfness of agnosticism and a rejection of the perverted ethics of hedonism" (i, vi). Both intellectual and ethical excellences are claimed in its behalf. It "means perspicuous simplicity. It is the systematic and clear conception of an intelligible reality." It is the "classical philosophy" (i, 251). Materialism invariably leads to hedonism or utilitarianism; spiritualism or idealism leads to asceticism; but this classical philosophy "finds the purpose of existence in the constant aspiration of realizing a higher and better, a nobler and more beautiful state of existence" (i, 189). In short, it is a new gospel not only for the philosopher in his search for truth, but also for the people in their chase for happiness and fulness of life.

All this is promising, but what is to be expected in the performance? Is this new occidental philosophy pagan or Christian? Does it square well or ill with the things most surely believed throughout the Church of God? Does it ring true or false to what Christendom reveres as the Word of God, and does it acknowledge or regard the fundamental elements of Christianity?

In finding its theological and religious valuation, we have two methods within our reach. We may take the plain utterances of the author himself as bearing upon our inquiry, or we may take his system and decide upon it for ourselves.

For himself, the author, while claiming everything for his philosophy, frankly affirms his radical break with evangelical Christianity. He tells us that he does *not* persist in calling himself a Christian, although to a great extent he gladly accepts Christ's ethics. He regards Christ and Christianity as radically different. He seeks the direct revelation of God in the facts of life and solemnly warns us that "the surrender of science is the way to perdition." If theism is identical with supernaturalism—and it certainly is—then he tells us that he must beg to be classed among the atheists. There is no disputing the correctness of this classification; and, as a confession of faith, we have here enough to place Dr. Carus among the Philistines.

But, passing by the teacher, let us look into his teaching to see whither it tends, theologically. The bottom postulate of a philosophy correlates with the theistic conception in theology. Dr. Carus' final postulate is the "Laws of

Form." Metaphysically, this foundation hangs in midair. Every impulse of the modern philosophical spirit, crying out for the ultimate personality, is ignored and repulsed. We fail to see wherein the positing of these eternal laws has a single advantage in the search for a metaphysical *terra firma*; and certainly the considerations which have brought the sanest and strongest of the accredited philosophers in Christendom, especially in recent times, to acknowledge personality as the highest note and final category of our thinking are, metaphysically regarded, incomparably to be preferred. But with Dr. Carus these laws are God. "By God we understand the order of the world that makes harmony, evolution, aspiration and morality possible" (i, 152). He conceives God to be not less than a person, but more; and yet, building perhaps more consistently than he intended, he calls God "it" and not "Him." The conception of God as a person is poetry, not science. These eternal laws "possess all those qualities which a pious reflection has attributed to God" (see i, p. 54). The Cosmos, which is the One, which is God, is the foundation of morality. "We may compare it to a father and with Christ call it 'Our Father,' just as well as we like to speak of Mother Nature" (i, 323). But it must be remembered that this is only a simile which, if carried out, would lead to serious misapprehension.

This is not exactly the theism of the decalogue. Monism is monotheism, but wait to hear what kind of monotheism it is: "God is not one in number, but one-in kind. He is unique. To believe in one God, as opposed to several Gods, is a pagan view which is more advanced than polytheism, but remains upon the same level" (ii, 155, 156). Monism revises the second word of the law and tells us that even as we shall not bow down ourselves to graven images nor serve them, so also we shall not bow down before the true God which is the All-in-All to worship it. "We do not call the All God in order to bow down into the dust and to adore it. We regard adoration as a pagan custom which, it is a pity, survived in Christianity" (i, 261). This is a consistent corollary, it is true; but it is the consistency of a deliberate and downright twentieth century paganism, which not only would smash the shrines of all creeds and cults, but also would throttle the very instinct of religion in man, which leads him upward toward his God. Religion is only man's aspiration to be in harmony with the All; it matters not how well he succeeds; it matters not that, whatever he is or becomes or does, he is still, in spite of himself, a part of the All; only let him *aspire*, and that is the Alpha and Omega of religion.

Nor is this new Positivism less advanced in its doctrine of Man. *Talis Deus, qualis homo*. Man is the flower of nature—not even its fruit. Mr. Edison says that, in its own little way, the atom is everything that man is. Dr. Carus agrees, and yet the atom itself is but a convenient scientific fiction. The ego is no entity. Memory produces selfhood, not *vice versa*. Person-



ality is the symbolical thread on which are strung the beads of our existence. The ideas which live in us constitute the self. Abstract thought helped to make man man; but, pray, how could it help to "make" him man, seeing that he must needs be man before he could be helped by it? Truth is relation; if it has any meaning, it is correct cognition. Man is the child of the cosmic past; but the Cosmos is the All-God; therefore, man is the son of God. As a rational being "man's begetter is not his brute progenitor, but the eternal order of the universe" (ii, 224, 225). This is fatalism stripped of every shred of the idea of providence or plan or personality. Such an anthropology is quickly self-interpreting. Man is but a coördinating factor in the living All. Atoms are centers of living spontaneity. There is no push or pull of gravity from without; all nature lives. This all-pervading spontaneity comes to the front in God-like beauty in the moral character of man. But he is dust and only dust; into dust he need not return, for only dust he ever is. "Christ's words are literally true when he says, 'God is able of these stones to raise up children unto Abraham'" (ii, 54). Any doctrine of man which makes his soul to consist only of a series of successive states, whether taught by Emmons or Spencer or Dr. Carus, takes away the franchise for any intelligent notion of immortality which involves a continual personal existence and consciousness after death, and so does violence not only to the Christian religion, but also to the highest extra-Christian faiths of mankind.

But it is needless to compass all sides of this pretentious philosophy. The touchstone of any system of thought is to be found in its attitude toward theism. Its teachings must have either a direct or an indirect theological reference. Not that the philosopher must wait with a "By your leave" for the theologian; but the theologian must find room for himself within the pale of a philosophy or he forthwith declines to abide there.

The principles of this Positivism are a direct negation of many of the most elementary truths of Christianity. Its unitary conception is not the unity of truth, but the essential kinship, the identity of the All; the oneness of the whole enclosing circumference of reality, together with all that it encloses. It is Pantheism robbed of its mystical adorations and its confessedly somewhat redeeming features. It is Cosmism, scorning the more and more generous conceptions to Christianity of the lamented author of *The Outlines of the Cosmic Philosophy*. It is not so far from Comte's Positivism as it imagines; for it regards with patient and patronizing complacency the crude anthropomorphisms and excrescences of mankind's present religious state, remembering that mythology is ever an indispensable ladder to be climbed in making the difficult ascent to truth.

Dr. Carus is at no pains to make his peace with evangelical theology. He has chosen his own way, but he will never win the thought or the heart of humanity. His philosophy will be accurately classed as atheistic, and athe-

ism is false philosophy. To make God One with the Cosmos is, to an ardent scientist who makes the way of science the way of life and the surrender of science the way of death, not acosmism, as Spinoza, the God-intoxicated man, would hold it, but atheism, as the world-intoxicated scientist is bound to hold it in the end. For the human mind is not ingenious enough to be able to hold consistently the same thing as God and the world. Its faith becomes either atheistic pancosmism or pantheistic acosmism. However successful Spinoza was in holding consistently to the latter, this new philosophy, with its commendable but overstated loyalty to empirical science, is essentially the former, pure and simple.

The merit of this philosophy is that it wears no disguise. It spurns the idea of the unknowable and truly argues that all that exists is capable of being known. Like all other implicitly atheistic systems, it is inconsistent enough to substitute eternal law for God and the Cosmos for the basis of the indispensable authority in religion and in ethics. It withholds Mr. Spencer's patronizing but inconsistent sop to the superstitions of the religious and coldly bids men, since there is nothing adorable to adore, to cease from the pagan folly of adoration. This forbids all worship of God; and why not? for there is no God such as men could worship. The Great Teacher said to the woman of Samaria: "God is a Spirit, and they that worship Him must worship Him in spirit and in truth." The voice of the new Positivism, speaking forth from the shores of Lake Michigan, says: "Spirit is not a substance; spirit is the significance of words;" and, again, "Adoration is a pagan custom which, it is a pity, survived in Christianity."

TRENTON.

HENRY COLLIN MINTON.

### THE GOD OF SCIENCE.

IN REPLY TO REV. HENRY COLLIN MINTON.

AMONG recent reviews of my works, a criticism of *Fundamental Problems* and *The Surd of Metaphysics* by Rev. Henry Collin Minton of Trenton, which appeared in *The Princeton Theological Review*, is distinguished by fairness and gives upon the whole a correct statement of my views; yet it contains at the same time a vigorous denunciation of my philosophy as atheistic and hostile to Christianity, if not to religion in general, I wish to submit the case to all who are inclined to agree with Mr. Minton for reconsideration, and, in order to let readers of *The Monist* judge for themselves, I take pleasure in reprinting his review in its entirety, and will limit my answer only to the most important point at issue—the objection of atheism.

Mr. Minton overlooks the distinction made by me, between Determinism and Fatalism; he claims that I say "Man is dust and only dust; unto dust he need not return, for only dust he ever was." Obviously, Mr. Minton mixes me up (strange though it may seem) with Yahveh, the God of the

ancient Hebrews, who utters a verdict to that purpose in Genesis iii, 19. Yahveh says: "Dust thou art and unto dust thou shalt return." Yahveh does not use the word "only," but he means it, and Ecclesiastes agrees with Yahveh's materialistic philosophy, which he states in shocking crudity (iii, 18-22), saying that "man hath no pre-eminence above a beast." I object to this one-sided view. I say that man, the human of man, is his soul, and man's soul is not of the earth earthy; while the body will turn to dust, the soul is not subject to decay.<sup>1</sup> I have much to say on this subject, but I will drop all points of minor importance and limit my answer to our difference concerning the idea of God.

Mr. Minton says: "The touchstone of any system of thought is to be 'found in its attitude toward theism. Its teachings must have either a direct 'or an indirect theological reference. Not that the philosopher must wait 'with a 'By your leave' for the theologian; but the theologian must find room 'for himself within the pale of a philosophy, or he forthwith declines to 'abide there."

I agree with Mr. Minton that the God question is the touchstone of any system of thought. I further agree with him that the philosopher need not ask for a "By your leave" from the theologian, and I even agree that the theologian has the right to decline to "abide" within the pale of a philosophy which leaves no room for his God. He calls my philosophy "pretentious," and I will not quarrel with him on points of etiquette, for theologians have the advantage. They can afford to be modest and yet be positive, because they proclaim, not their own private views, but the truth of God. Mr. Minton should consider that I can turn the tables on him. The case can be viewed from the opposite standpoint. The philosopher investigates theologies, and he tries whether he can find room in any one of them for his philosophy. When I compare notes with a theologian I am above all interested in his God-conception, and, if his God-conception gives to science what is of science, I shall be glad to abide with him.

Judging from Mr. Minton's comments, I fear that his God belongs to the old-fashioned circle of deities whose dwelling-place is in darkness and who cannot stand the light of science. If he worship the God who needs nescience in order to have at all a right to existence, I am not specially pained if he prefers to part company. But we may, after all, find some common ground, if his God be (as I am convinced he is) the God of Protestantism, a God that lives in light, a God of truth, not only of the truth of sentiment, but also of the truth of science; further, of righteousness, of good will and lovingkindness, not only in questions of charity, in taking care of the sick, and preaching the doctrine of love, but also in our actual

<sup>1</sup> See my article, "The Ascent of Man," in the March number of *The Open Court*.

intercourse with the people who differ from us in opinion, even if they are infidel philosophers.

The fact is that more than thirty years ago I was in exactly the same place in which Mr. Minton is now. I can understand him, but he does not understand me. I know his God-conception in all details, for it was my own belief when I was either at his age or at least at his stage of mental development. I have given up that God-conception not by any perversity of heart or any objection to Christianity. Nor did I surrender my faith rashly. On the contrary, I gave it up reluctantly and against my will. When I gave up my belief in God, in that individual divine monarch who performed miracles and listened to the prayers of his humble worshipers, all my hopes and moral convictions were so intimately intertwined with my lost belief that my entire religious world broke to pieces and I felt all the horrors of perdition on account of the unbelief to which I had fallen a prey. It was only after years of groping after the truth that I regained my mental equilibrium and that I found again truth in the faith of my childhood if I were only permitted to interpret the dogmas in a symbolical sense. I have ever since tried to see how religious convictions might be adapted to scientific truth, not by compromise, but by a frank surrender of error, and the result was that I formulated a God-conception that is unequivocally tenable on scientific grounds. If Mr. Minton, for the sake of his religion, extends no welcome to my philosophy (or, more correctly stated, to the philosophy of science, for personalities have nothing to do with the case) it is certainly not the latter (the philosophy of science), but only the former (his religion) which in the long run will have to suffer; for (to repeat a sentence of mine, which Mr. Minton disapprovingly quotes), "The religion which opposes science is doomed."

I have lost the God of my childhood and I have become, in the opinion of those who still believe as I did then, an atheist, but the more I think about the God-problem, the surer grows my conviction that the God of science is the true God, and the God of mediæval theologians is a mere makeshift, a substitution for the true God, a temporary surrogate of God, a surrogate which at the time, was good enough for immature minds, but too often only led people astray. The God of heresy trials and witch persecutions is not the true God, and the theology of the inquisition is a sad aberration, whatever its pretensions and claims of Catholicity may be.

Gods will be tried as much as mortals, and they should be judged according to their deeds. Compare the God of miracle and special revelation with the superpersonal God of science whose cause is identical with truth, with righteousness and justice, and then make your choice.

Mr. Minton claims that in my philosophy "every impulse of the modern philosophical spirit crying out for the ultimate personality is ignored and

repulsed." The term "ultimate personality" is not fortunate, but I will not haggle about words, whenever I have good reasons to know the meaning; and so I answer that his statement is not true, in so far as I have myself decidedly advocated the justice of speaking of God as a person, only I insist that God's personality is not human, but divine.

God's thoughts are not transient successive representations, but eternal verities, some of which are formulated by naturalists as laws of nature. God's thoughts are everlasting and omnipresent, being all-efficient in every instant. When we consider that actual events in the world shape themselves according to their regulations, we must grant that they prove omnipotent. In so far as they are perfect in every respect, they may be called all-wise, although the term implies a gross anthropomorphism. They are not wise in a human sense; they are all-wise, being the standard of all wisdom. Since nothing escapes the omnipresence of God, they may be characterized as omniscient. Yet here, again, they are not omniscient in a human sense, but in a higher sense, penetrating into the most secret recesses of existence. Finally, in so far as they justify truth, goodness and right, if not at once, yet in the long run, we may call them all-good, omni-benevolent, omni-beneficent, and, at any rate, they are the ultimate standard of morality. Such has been the nature of God, since in the evolution of religion God was identified with justice and righteousness. I am far from denying or ignoring the desire to think of God under the allegory of a person. I only remain conscious of the fact that it is a simile. Further, it is important to stand in a personal relation to God, to bear in mind that He is the God of the whole world and also of me individually; but I am at the same time aware of the child-like confusion which frequently prevails in the God-conceptions of pious souls. If their piety keeps in proper limits and does not ascend the tribunal of the inquisition, their erroneous views are not only harmless, but may be regarded as a surrogate of the genuine piety which has grasped the true nature of a truly divine God.

It is not fair to say that I propose to "smash the shrines of all creeds" or "to throttle the very instinct of religion in man;" for, on the contrary, I see in religion the deepest and most important impulse of man's humanity. My criticism of the errors of religion in its lower phases does not blind me to the enormous significance of all religious aspiration, and I am glad to recognize the goodness of the religious instinct even where it is still obscured by superstitions and idolatrous practices. In my opinion, it is the duty of the philosopher to judge every religion according to the best interpretation that its best representatives have given it. Aberrations should not be concealed, but the motive of the aberration should be explained without personal disparagement.

Mr. Minton characterizes my God-conception as "pantheism robbed of

its mystical adornments and its confessedly somewhat redeeming features."

Pantheism identifies God and the world to such an extent that God is the sum-total of all being. I object to pantheism because God is not the sum-total of all things in the world; God is the cosmic order, the entirety of the factors that shape the world. Accordingly, God is not the All, the totality of nature, but a definite feature of the world. God as the cosmic order, it is true, is everywhere in the world, but he is not the material world itself. God is not the whole, but a part of the world, and here the old paradox becomes true, that the part is more than the whole. The determinate factors of the world, the eternal norm of being, the divine in the real, is so much more real, so much better, so much more powerful, than any and all single realities, that it exists independently of nature and would remain, even if the whole world did not exist—a truth which justifies the term "supernatural." God is the super-real in the real, the hyperphysical in the physical, and the supernatural in the natural. Yet the supernatural is not anti-natural, nor is it extra-natural; it is present in the natural; it lies latent in the lower spheres of the inorganic world and becomes apparent in the soul of man.

The fundamental difference between Mr. Minton and myself is this: He believes in a personal and I in a superpersonal God, and to him the superpersonal God is impersonal. Mr. Minton does not call me an atheist, but other theologians have done so, and I will freely grant that in so far (but in so far only) as a truly superpersonal God makes the personal God redundant, my philosophy will naturally appear to many as atheism, because it antagonizes or renders antiquated the old-fashioned theology of a personal (i. e., an individual) God. But the man of science will understand that the idea of a superpersonal God is tenable before the tribunal of the severest critique, and so my God conception will finally be considered as a higher theism, truer, more scientific, and more genuine than the old belief, if only we agree to be serious in the purification of the God idea, if only we mean to think of God as a truly divine being, if only we are serious in looking upon him as truly eternal, omnipresent, omniscient, omnipotent, etc. The theologians, of the past have never been serious in thinking out these qualities of God to their very last conclusion. They have illustrated them with a childlike naïveté and made of God, instead of a divine person, an enormously huge human person, a deified individual, an Ego entity, with all its weaknesses, retaining the most human features of the simile and rejecting its truly religious meaning.

Now, I will confess to Mr. Minton and to all theologians who may care to know, that in my theological development I actually passed through an era of unequivocal and avowed atheism. I turned atheist, when I understood that law is supreme and must be supreme, that the highest authority in matters of truth and morality are not verdicts of an individual being, be



it ever so huge and powerful, but that they are eternal and unalterable norms. Nothing can be more eternal than eternal law.

Principle is above any deity, truth is higher than any God, and if there is anything divine at all, truth constitutes the very essence of divinity. Says Esdras (1 Esdras, iv, 35):

"Great is the truth and stronger than all things."

The book is apocryphal, but the glorification of the truth which it contains is worthy of being quoted in full. Esdras says (1 Esdras, iv, 38-40):

"As for the truth, it endureth, and is always strong; it liveth and conquereth for-evermore.

"With her there is no acceptance of persons or rewards; but she doeth 'the things that are just, and refraineth from all unjust and wicked things; and all men do well like of her works.

"Neither in her judgment is any unrighteousness; and she is the strength, 'kingdom, power and majesty of all ages. Blessed be the God of truth."

The question is not whether or not my God is a personal being, but whether or not my God is the God of Truth.

I will boil down the God problem to the simplest possible statement, and if Mr. Minton will be kind enough to criticise my atheism and correct me where I am wrong, I will be glad to revert to the old theological anthropomorphism.

Uniformities of our experience which naturalists formulate as natural laws are ultimately reduced to principles of the formal sciences, logic, arithmetic, mathematics, etc. We will select the simplest of all, arithmetic, and take as an instance the simplest statement,  $2 \times 2 = 4$ . This statement is typical of all other purely formal statements in all the purely formal sciences. We might as well take any complicated equation, for instance, the formula of the Newtonian law of attraction or the result of calculations by which we predict with great precision the movements of the celestial bodies, or events in physics, or the result of any natural process. All formulas of scientific certainty, if correctly stated, are finally just as intrinsically necessary as the equation  $2 \times 2 = 4$ . Now this statement is intrinsically true, and so are all the conclusions of all the purely formal sciences, and since the purely formal features are the determining factors in the laws of nature, the laws of nature themselves are of the same intrinsic necessity. Such as they are, they are immutable; they must be so, and cannot be otherwise, and we can understand that if certain features of reality are given, the consequences are definitely determined, and cannot be otherwise. Scientific comprehension really consists in formulating experiences as uniformities and pointing out their necessity.

Now the question is—Has this equation,  $2 \times 2 = 4$ , been made such as it is by a God or is it intrinsically necessary? If it (and with it the entire cosmic order) has been made by a God, then God is superior to the formula.

If, however, God, the Creator, when about to create the world, considered the intrinsic necessity of formal laws and like a master-inventor adapted His plans of construction to eternal and immutable norms, He is no longer supreme, but is subject to some higher power, the eternal necessity of law.

Plato's God is not God in our sense. Plato speaks of necessity as above God. Plato's God is the Demiurgos, the master-builder of the world. Further, Brahma, the God of the Brahmans, is the world-soul; and the world-soul, too, is subject to eternal law. The world-soul (as conceived by the Brahmans) is a great and noble creature. It is as much bigger and higher, and, perhaps, also, as much better, than man as perhaps man is superior to an ant, or even to a microbe, or to a white blood corpuscle that courses in his veins; but, after all, the world-soul is not truly God, but an individual being, a creature of the true God; and the principles of truth and goodness and justice are his norms as much, and not a whit less, than they are the norms of man. I for one cannot conceive that God made  $2 \times 2 = 4$ , or any other purely formal statement. The harmony of mathematics is not extraneous, but intrinsic, and there is no room for an individual lawgiver who made the laws, such as they are, eternal and necessary.

Having been told from my childhood that all other God-conceptions save the traditional interpretation of Biblical theology are atheistic, I jumped to the conclusion that theism is wrong and that atheism is right and, preferring truth even to the faith of my childhood, which was very dear to me, I discarded religion and turned infidel.

I thought at the time that I was irreligious, but I know now, from experience, that all infidelity is only a phase in our religious development.

Ingersoll was the son of a clergyman, and there was more of his father in him than he knew himself. He was a born clergyman, and all his scoffing, his blasphemy, and flippant jokes about things sacred are evidences of his deep interest in theological questions. The disappointment of our expectations naturally turns our love into hatred, our infatuation into spite, our disappointed hopes into bitter denunciations. The historians of a later age will give Ingersoll a place in the development of theology, and will give him more credit and more honor as a theologian than the leaders of our orthodox churches of the present day are inclined to allow.

I remained an atheist so long as I felt merely the need for a negation of errors; but very soon I began to yearn for a positive statement of my convictions, and I tried to construct a new world conception out of the débris of the shipwreck which my religion had suffered. When I inquired into the scientific explanations of the universe, and when I investigated the nature of the moral problem, I found that what I had attributed formerly to an individual being, a great cosmic monarch, or a purpose-endowed world-soul, was actually accomplished in a much grander and a more unflinching way

by natural law; and natural law is not the mere formula of the naturalist, but a living factor, an omnipresent power that although immaterial, rules supreme everywhere in exactly the same manner which must be attributed to God if the conception of God's nature be freed from gross anthropomorphism. Moreover, all the natural laws form one great system of an intrinsic and organic unity—a kind of spiritual organism, and we may in this sense call it a person, only we must understand that this person is not an individual, not a person in the human sense, but the omnipresence of efficient law. It is the norm of being, which, when it illumines the consciousness of sentient beings, through the development of reason, constitutes their personality. There is a standard of right and wrong, of good and evil, of truth and falsehood; there is an objective condition in the constitution of the world that makes man possible as a rational and a moral being. Whatever it may be, that is God.

Thus I had found God again, yet God is to me no longer a particular and concrete reality, but the super-reality of universal and eternal efficiency. Here is an undeniable factor possessed of all the qualities formerly attributed to God, doing all the functions of God and serving at the same time in the broadest way as the ultimate authority in the field of conduct. Here is the prototype of man's personality; for human reason is nothing but the reflex of the cosmic order—the rationality of the universe. Here alone is the standard of truth and untruth, of right and wrong, of goodness and badness; and when I became confronted with the claims of wrong liberalism rejecting all authority in science as well as ethics; when I considered the claims of Mr. Spencer's agnosticism, that the ultimate mystery of the world is absolutely inscrutable, that accordingly in ethics hedonism rules supreme; that there is no good and evil in the moral sense of the word, but that good is merely that which yields most pleasure, I found that in these essential points—in points relating to conduct—agnosticism is wrong and that the traditional religion is right. We have only to mind that the traditional view is expressed in poetical terms.

Mr. Minton calls me a pagan, but whether or not he is right depends upon the meaning of the name. The word, according to its etymology, means "villagers," "country folks," or "people that live in the heath." Hence, the Saxon term, "heathen." The pagan is contrasted to the inhabitant of the city, the "urban." The latter is supposed to be urbane and progressive, but the former is considered a boor, a hayseed, a reactionary conservative. While the urban population had adopted the new faith (Christianity) the pagan still clung to his belief in the ancient gods, and thus pagan came to mean a worshiper of any one of the pre-Christian religions.

To-day the word "pagan" is used in different senses. Some Christians (especially those that are inclined to be dogmatic) call pagans all non-

Christians, fetich-worshippers as well as philosophers. This makes not only the cannibals pagans, but also the ancient Greeks and Romans, the large masses of the Chinese, the Japanese, the Siamese, and the Hindus, including all non-Christian sages, Socrates and Plato, and Buddha.

It seems unfair to use the word "pagan" promiscuously for Plato as well as the idolator, and I propose to use the word "pagan" for all those who are so backward in their religious development that they still believe in the letter of their religious myth instead of accepting the spirit of it. If Plato speaks of Zeus, he does not mean merely the personification of the sky, but God, almost in a Christian sense. However, the idolator who kneels before a Zeus statue and believes that it is the residing place of a spirit called Zeus, is a pagan, and it becomes apparent that if the word "pagan" is used in this sense, that while Socrates and Plato cannot be called pagans, there is much paganism still left in Christianity, not only in Italy and other Catholic countries, where saint-worship bears a strong resemblance to the ancient polytheism, but sometimes even in Protestant countries, where the God-conception in many minds is by no means free from crude anthropomorphic conceptions. It is pagan to think of God as a great benevolent man seated on a throne in the heavens; it is pagan when the dogmas of the symbolical books are believed literally, and not in a symbolical sense; it is pagan to kneel before an icon and expect help through a worship of it.

The dogmatic Christian looks with contempt upon pagan mythology, without being aware that there is also a Christian mythology, and, as a rule, those Christians who call dissenters infidels and pagans are pagans themselves; the Christian pagan, however, is more ingenuous than the pagans of Greek and Roman antiquity, for the latter were mostly conscious of the mythological nature of their gods, while the dogmatic Christian of to-day is still a believer in the letter of his mythology.

When I became aware of the truth that the essential part of a religion, a philosophy, a world-conception, is that feature which determines its ethics, which finds practical application in conduct, I found myself necessitated to revise my atheism, and now I discovered that the very arguments which had upset my belief in an anthropomorphic deity, furnish the most solid foundation for a truer and nobler and better God-conception.

Having regained a positive ground, I learned to judge the situation objectively, and I came to the conclusion that my views are the legitimate outcome of a consistent further development of the faith of my childhood, and I have no doubt that Mr. Minton himself, or his sons and his disciples, will by and by reach the position in which I stand to-day. I am fully aware of my kinship to former stages of my religious development, and since then whenever I feel an Ingersollian irony come over me, I am conscious of its being the criticism of my own prior self.

Far from being averse to religion, I love it, and am deeply interested in it. Other religions that are kin to Christianity, especially the old original Buddhism, and the pure teachings of Lao-Tze, are naturally sympathetic to me, but Evangelical theology takes the place of a direct spiritual ancestry. It seems as if Mr. Minton had noticed the special regard I pay to it, but he views my consideration of it not without distrust, for he says of my philosophy that:

"It regards with patient and patronizing complacency the crude anthropomorphisms and excrescences of mankind's present religious state, remembering that mythology is ever an indispensable ladder to be climbed in 'making the difficult ascent to truth.'"

Replace the words "patient and patronizing complacency" by "sympathy" and I will make no objection to Mr. Minton's statement.

There is a peculiar charm in the God-conception. These three letters, G-O-D, are a treasure of uncommon riches. They embody all that is great, and noble, and good, and right, and true. It is one of my greatest efforts in life to preserve this grand idea from the shipwreck which Christian paganism (the dogmatic belief in the letter) is bound to incur. To those who call me an atheist, I answer that I am not a common atheist; I am an atheist who loves God. But, after a careful inquiry into the problems of the nature of God and the history of the God-conception, I have come to the conclusion that my philosophy is not atheistic.

A German scholar writes in a German encyclopedia:

"The conceptions concerning God are very different, and there are many 'who denounce as atheism every view which differs from their own.'"

How true is this statement! It may be applied to both my opponents and myself. Mr. Minton calls me "a twentieth century pagan" because I do not believe as he does, and I call him "a Christian pagan" because he believes in the letter of a dogma which was originally not meant to be taken literally, for it was proclaimed as "a symbol," being contained in the collection of Christian credos, officially called "symbolical books."

The more I ponder on the God-problem, the surer grows my conviction that the God of science, the God whose existence no atheist could deny, whose reality cannot be doubted by anyone who has once understood its significance, is not less in power, and dignity, and divinity, than the old god of dogmatism, but the highest God that any system of thought has ever had any cognizance of, and no one who has grasped the idea of divinity, or ever took it seriously, will deny that the old God is a mere makeshift in default of man's capacity of comprehending the true divinity that sways the universe, gods and god-conceptions, and men, the starry systems, suns and planets, mites and motes, the infinite expanse of the extended milky way, with probably other worlds beyond, and the most intimate commotions in the hearts of sentient beings.

Mr. Minton takes me to task that my God does not stand in need of adoration, and that I condemn adoration as a pagan custom. All depends upon the meaning of the word.

"Adoration" is derived from the Latin "*os*" = "mouth," and means throwing a hand-kiss to a person or deity to whom one is devoted. The usual attitude of pre-Christian pagans before their gods, as represented on the monuments, is with the fingers of the right hand on their lips. I have no objection to lip service of any kind, nor to any form of dignified adoration, but we should not encourage self-humiliating ceremonies. Religion should elevate man, not degrade him, and so I have no room for any God who enjoys the spectacle of prostrate and kneeling worshipers. Remember that even earthly monarchs, if they become civilized, are disgusted with the kowtowing of their subjects.

My view of worship is, briefly stated, this: If worship is taken in the usual sense as an act of submissive flattery, I do not propose to worship God. However, if worship is to signify, what it does according to its etymology (Anglo-Saxon *weordhscipe*), "considering and bearing in mind the worth of something or somebody," I do propose to *worthship* God. All of us should fully appreciate the import of God, for our lives and for those who shall live after us. Such a worship is one "in spirit and in truth," as is commended by Christ. It will keep us in harmony with humanity as well as with the cosmical order of the universe. It will not disparage but elevate man as the first-born son of nature and the legitimate child of God.

The same holds good of prayer. Supplication, with kneeling down in abject self-humiliation, should be discontinued. But if prayer is a severe self-criticism, a moral atonement for trespasses committed, and also a vow to do better in the future, a strengthening of our moral sense for avoiding errors, if prayer thus keeps us in unity with God, the eternal standard of morality, prayer is recommendable.

There is no sense in praying for rain, or for the abatement of a storm, or for a change in the course of nature. If we do so, our prayer may prove an alleviation to our troubled mind, but it will have no effect upon nature, for the laws of nature are immutable. Nor is there any sense in trying to alter God's will; but there is sense in praying for a change in our own will, a change of our attitude in life, of our own mental and moral disposition, and this is not only recommendable, but highly desirable even from the standpoint of science. Man can only gain by the establishment of a personal relation to the divine will, meaning by it the moral demands made of man by the cosmic order. Our hearts are sanctified by a devotional attitude toward that all-presence which we have defined as true divinity. If this personal relation finds expression in words it will assume the form of vows, of self-exhortation, of praying for the power of



resistance in temptation, for strength and energy when great tasks confront us, for fortitude in misfortune, for patience and submission to the inevitable ills of life.

There is but one true worship, which consists, as Christ declares, in doing the will of God, and there is but one prayer that is not heathenish, the Lord's Prayer, "Thy will be done," for it is not a beggar's petition but a vow of self-discipline. Finally, there is but one religion; it is the spread of goodwill upon earth, yet it cannot be realized without an uncompromising submission to truth. Let us by all means respect the symbols in, with, and under which religious truths are taught; but the significance of a creed is more than its symbols; the meaning is greater than the dogma; the spirit is higher than the letter.

EDITOR.

#### ON THE DEFINITION OF AN INFINITE NUMBER.

"THE whole is greater than any one of its parts," is one of the most useful axioms of elementary geometry. In view of this fact it appears somewhat remarkable that the most useful definition of an infinite multitude should be, "The whole is equal to one of its parts." To understand this definition fully it is necessary to define the terms equal and parts.

One of the most primitive modes of proving the equality of two multitudes is the placing of the units of the multitudes in a (1, 1) correspondence. That is, if it is possible to associate with every unit of each multitude one and only one unit of the other, the two multitudes are said to be equal. The idea of a (1, 1) correspondence is doubtless one of the earliest mathematical concepts, and it is generally supposed to have given rise not only to the number concept, but also to number words.

When the child employs his fingers or other objects in counting, he gives evidence of the early development of the power "to relate things to things, or to represent a thing by a thing, an ability without which no thinking is possible."<sup>1</sup> Hence, there is no simpler or more definite way of proving that a part of a multitude may be equal to the whole than by establishing a (1, 1) correspondence between the units of a part and the units of the whole. The totality of positive real numbers furnishes one of the most interesting examples of such a multitude.

If in the equation

$$y = \frac{1}{x+1},$$

we let  $x$  represent any real number whatever  $y$  will also represent a real number. For two distinct values of  $x$  the corresponding values of  $y$  will be

<sup>1</sup> Dedekind, *Essays on Number* (translated by Beman), page 39.

distinct. Moreover, if  $x$  is replaced by any positive real number whatsoever,  $y$  will be equal to a positive proper fraction. That is, there are just as many positive real numbers which do not exceed one as there are positive real numbers, including those which do not exceed one.

It should be observed that this is not juggling. Only perfectly valid thought processes are employed. The given equation shows in a clear and definite manner that the positive real numbers which do not exceed unity can be placed in a (1, 1) correspondence with the total number of positive real numbers. That the former constitute a part of the latter is universally accepted. Hence we must say that a part of the positive real numbers is equal to the totality of these numbers.

By employing the equation

$$2y = \frac{1}{x+1},$$

we can show, in exactly the same manner, that the positive real numbers which do not exceed one-half are equal to the totality of real numbers. More generally, by employing the equation

$$ay = \frac{1}{x+1},$$

it appears that the positive real numbers which do not exceed  $\frac{1}{a}$  are equal to the totality of these numbers. It deserves to be emphasized that we are not dealing here simply with a mathematical curiosity. The real numbers furnish the foundation of a great part of the work of the student of mathematics, and it appears unpardonable to overlook any of their important properties.

The developments of mathematics have always been greatly influenced by discoveries of facts which are at variance with what was generally accepted. Of such discoveries in comparatively recent times three are especially noteworthy on account of the fundamental principles involved, namely: (1) There are perfectly consistent geometries in which the sum of the angles of a plane triangle is not equal to two right angles. (2) There are algebras in which the commutative law of multiplication does not hold. (3) There are multitudes or aggregates such that a part is equal to the whole.

The first of these discoveries is perhaps better known than either of the other two. In regard to the second, Poincaré recently said:<sup>1</sup> "Hamilton's quaternions give us an example of an operation which presents an almost perfect analogy with multiplication, which may be called multiplication, and yet it is not commutative, i. e., the product is changed when the

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Poincaré; *Bulletin des Sciences Mathématiques*. Vol. 26, 1902, page 260.

order of the factors is changed. This presents a revolution in arithmetic which is entirely similar to the one which Lobatchevski effected in geometry."

The third one of the given discoveries has perhaps made the least impression on popular thought, and yet it is certainly not less fundamental than either of the other two nor is it more foreign to the usual trend of human thought and interests. When thought is not artificially restrained it naturally enters upon the infinite, and, as in other domains of science, so in the science of the infinite, nothing capable of proof ought to be passed by without proof. Moreover, it is most important that the facts which do not agree with what has been generally accepted should be popularized, on account of their corrective influence on the human intellect.

In the above proof that a part of the real positive numbers is equal to the totality of the numbers, the term *part* was employed in its universally accepted sense. In general, we shall say that a given aggregate is a part of a second aggregate, provided all the units of the first aggregate are contained in the second and the second contains at least one unit which is not in the first. For instance, we shall say that the even positive numbers are a *part* of all the natural numbers. Since it is clearly possible to associate with each natural number its double, the natural numbers constitute an infinite aggregate. In fact, we may establish a (1, 1) correspondence between the natural numbers and a part of these numbers in an unlimited number of different ways. For instance, it is possible to associate any multiple or any power of the number with each of the natural numbers.

By the same method it may be proved that time, according to the common conception, is infinite; for there is a (1, 1) correspondence between the total number of hours and the total number of half hours. If the half hours from any period would be denoted by the natural numbers, the hours would correspond to the even numbers. Similarly, it may be observed that space (defined analytically by coördinates) is infinite, according to the given definition.

If it is possible to establish a (1, 1) correspondence between two infinite totalities, they are said to be of the same power. The totality ( $M_0$ ) formed by the natural numbers is especially important. Any totality which has the same power as  $M_0$  is said to be countable. It is an extremely interesting fact that all algebraic numbers are countable. In particular, it is possible to establish a (1, 1) correspondence between all rational numbers and the natural numbers. The developments along this line belong to the important subject known as the theory of aggregates (*ensemble*, *Mengenlehre*), where the full significance of the use of the infinite in mathematics is exhibited.

The simplicity of the given definition may perhaps become more evident if the matter is stated as follows: If a totality ( $M$ ) of units is given, only two cases are possible. Either  $M$  contains a part which contains as many

units as *M* or no such part exists in *M*. In the former case, *M* is said to be infinite; in the latter it is finite. It is not difficult to show that this definition does not violate the ordinary conception that the infinite is unlimited, while the finite is limited.

Dedekind was the first (1880) to use this definition of an infinite aggregate or totality as the foundation to establish the science of numbers. Bolzano and others pointed out at an earlier date that infinite aggregates have the property which is here used as a definition. It is now very generally employed, and the mind that can dwell upon it long enough to grasp even the most direct bearings cannot fail to derive from it an unusual amount of pleasure and profit, such as only great thoughts can give.

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#### NOTE ON "A BUDDHIST GENESIS."

Since my translation of the Buddhist Genesis document appeared in the January *Monist*, I have found that Rockhill rendered it from the Tibetan in 1884. (*Life of the Buddha and Early History of His Order*. Translated from the Tibetan. By W. Woodville Rockhill. London (Trübner's Oriental Series, 1884). I had known this book for years, but it escaped me when making the Genesis translation and also in my *Buddhist Bibliography* (London, 1903). In Rockhill's volume the Genesis document comes at the very beginning. Like the Sanskritised Prākṛit version used by me, it belongs to the Vinaya Pitaka. The Tibetan Canon is that of the sect of Realists (*Sarvastivāda*), whose account of the compilation of the Scriptures was translated by Suzuki, also in the January *Monist*. There are two versions of the Genesis document in the Tibetan Vinaya Pitaka: A short one in the Vinaya-vastu (corresponding in part to the Pāli Mahāvagga), and a long one (translated by Rockhill) in the Vinaya-Vibhāga (Pāli Bhikkhu-Vibhanga). The Theravāda sect, who have handed down the Pāli Tripitaka, do not place this document in the Vinaya, but in the Sūtra Pitaka. Thus do we prove the truth of the Island Chronicle of Ceylon, which says that the Realists, the Great Council, and many other sects, made recensions of the Canon to suit themselves. We must never forget that the Pāli, though the oldest version of the Canon known, is by no means the only one. The Mahāsamghika (Great Council) school also claims to be the oldest; and their Book of Discipline has come down to us in a fifth-century Chinese translation. Suzuki also gave us extracts from this, and we saw therefrom that they had no Abhidharma. This looks as if their Canon belonged to an earlier period than the Pāli, for the Abhidharma was in the nature of commentary, and was compiled after the Buddhists had split up into sects. We

know that one ancient sect, the Sautrāntikas (i. e., Sūtra-men) refused to admit the canonicity of the Abhidharma and were content with the Sūtra-Pitaka. Moreover, the Great Council sect not only tabooed the Abhidharma, but they also had a very short recension of the Fifth Nikāya. This collection, known as the Khuddaka (Short) in Pāli, was called the Miscellaneous Pitaka by other sects, and consisted largely of commentaries. The Great Council refused to canonize these commentaries, but admitted into it only the Udāna, the Itivuttka and the Nidāna.

It is high time that Japanese scholars translated the books of this early rival sect, which may yet be proved to be older than the Pāli.

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#### PRESENT-DAY SCIENCE AND RELIGION.

At a time when so much scientific literature is being issued to the public the questions naturally arise in one's mind, In what direction does this scientific influence tend? Does it make for religion, or does it favor atheism? Probably there never has been a time when an answer in the negative could be so definitely given to the latter question. Indeed, such is the attitude of religion to science that so advanced and broadminded a preacher as the Rev. R. J. Campbell has said: "I believe the next great rehabilitation of the fundamentals of religion will come, not from the side of theology, but from the side of science." This, no doubt, to many, will seem a daring pronouncement to make. Yet, is it not significant of present-day thought?

Such happy relations, however, have not always existed between religion and science. Science has had to battle hard for a recognition of its services to thought and progress, and, like religion, it, too, has had its martyrs. One has only to mention the names of Galileo, Bruno and Antonio do Dominis. Galileo, it is well known, was cruelly treated and imprisoned for promulgating the doctrine of Copernicus that the earth revolved round the sun; Bruno for teaching the plurality of worlds was sacrificed at the stake, and the body and books of Antonio Dominis were taken and burned after his death, because he attributed the colors of the rainbow to natural causes. If ever the fear existed that a knowledge of science was opposed to religion, that fear certainly was rife in the sixteenth and seventeenth centuries.

But what immense strides progress has made! Compare the situation just described with the condition of thought that now prevails, which makes acceptable such an utterance as that of the Rev. R. J. Campbell, quoted at the beginning of this article. He, apparently, has no fear of science being the foe of religion, but rather looks to it as an aid to strengthen men's beliefs in an All-wise Creator. One might say his attitude is that of the welcoming hand of religion to science, and, what is more, it is an appeal made not in

vain. Science, also, has extended her hand. Lord Kelvin, speaking quite recently, definitely stated: "I cannot admit that with regard to the origin of life, science neither affirms nor denies Creative Power. Science positively affirms Creative Power."

The question of the attitude and relationship of science to religion is one of long standing. It seems to have disturbed the thoughts of that great natural philosopher, Lord Bacon, whose judgment is very apropos to-day. In his "Sacrae Meditationes" he says: "This I dare to affirm, in knowledge of Nature, that a little natural philosophy, and the first entrance into it, doth dispose the opinion to atheism; but, on the other side, much natural philosophy, and wading deep into it, will bring about men's minds to religion." This, indeed, seems true. Many readers will remember that when their minds first opened to the elementary truths of natural science, there was a tendency to doubt any agent other than "natural laws." But after "wading deep" into science, gaining further knowledge of the mysterious relations between living and non-living matter, the wonderful possibilities inherent in the elements, and the magnitude of the starry realms, the mind was compelled to bow in reverence before Him who has created so much that is incomprehensible.

The specific influence science has had upon thought, especially religious thought, is admirably stated by the late Professor Drummond, in his *Natural Law in the Spiritual World*. He writes: "Now that science has made the world around articulate, it speaks to religion with a twofold purpose. In the first place, it offers to corroborate Theology; in the second, to purify it." *To corroborate and purify*. That is the special influence science has had upon religion. Again, what does Lord Avebury—better known as Sir John Lubbock—say? "Science has always purified religion. . . . It is in those countries where science is most backward that religion is less well understood, and in those countries which science is most advanced that religion is purest." According to these two great authorities, then, science certainly does not oppose religion, but purifies it of superstition and makes the "world around articulate." Did not Longfellow hear that articulation in Nature when

"He wandered away and away  
With Nature, the dear old nurse,  
Who sung to him night and day  
The rhymes of the Universe."

That science does not "dispose the opinion to atheism" is surely sufficiently shown by the fact that such world-wide scientists as Copernicus, Galileo, Bruno, Newton, Darwin and Drummond have been believers in a Supreme Creator. Indeed, that greatest of living scientists, Lord Kelvin, has said: "We are absolutely forced by science to believe with perfect



confidence in a Directive Power." Likewise is the opinion of Sir Oliver Lodge. Scientific literature and scientific inquiry, evidently, do not incline to disbelief, but, as Bacon said, three hundred years ago, "will bring about men's minds to religion."

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## BOOK REVIEWS.

DR. OTTO WEININGER UEBER DIE LETZTEN DINGE. Mit einem biographischen Vorwort von Moriz Rappaport. Wien und Leipzig: Wilhelm Braumüller, 1904.

Dr. Otto Weininger's first and main work, *Sex and Character*, was reviewed in the January number of *The Monist* for 1904 (XIV, 2, p. 316), and we could even then discover in its author a certain nervous condition that indicated a neurotic and unbalanced state of mind. In the meantime his last work entitled *Concerning the Last Things* was edited by one of his friends, Moriz Rappaport, and here we learn more about this strange and abnormal man, who, possessed of high ideals, was nevertheless mainly interesting on account of the pathology of his mental development. Dr. Weininger, as we learn from the preface, handed his unfinished manuscript to his friend with the remark that in case he were incapable of finishing the book, he would entrust him with the work. Soon after Weininger ended his life by suicide.

Weininger was a dualist and his favorite philosopher was Plato. Next to Plato he loved Plotinus, Augustine, Pascal, Schopenhauer and Nietzsche. The latter two, however, he criticised severely, blaming them for regarding pleasure and pain as ultimate realities, and he called theirs, as well as Fechner's philosophy, "the world-conception of neurasthenics."

The favorite composer of Weininger was Wagner. Light was to him the symbol of everything good, the darkness of the deep sea the symbol of crime and evil. His work, *Sex and Character*, gives expression to the idea that woman is principally a sexual being, and he deemed it of importance to show the connection between sexuality and crime. Weininger used to say, "Ethics is never made as a present to anyone," and also that "Good people always have a shallow ethics," meaning thereby that good people, who never feel any temptation or the impulse to do wrong, have no proper idea of the ethical problem and its solution. Guilt was to him the center of all his thoughts. All suffering is due to guilt or inherited guilt. He distinguished between people such as have inherited a guilt and suffer thereby, and he called them "sufferers," and such who transferred their guilt upon others, and he called them "criminals."

Weininger accepted the belief in a soul and conceived the idea of a spiritual death, which is possible while the material body remains alive. The soul, in his opinion, is individual. Everywhere man has his own original sin and this sin is identical with his guilt. "His aversion against Jews, against women, and against Schiller," says Moriz Rappaport, "is solely due to their lack in exhibiting any dualism. Weininger rejected empirical optimism, but he believed in a transcendental one, which he identified with Paradise."

We recapitulate briefly what Herr Rappaport says about the author in the preface, page XIX.

"When he had finished his first work, *Sex and Character*, he said to me: 'There are only three possibilities for me; the gallows, suicide, or a future so glorious that I would not dare to think it to its end.' Since then his mental disposition grew worse. He studied the whole summer in Italy and sojourned for some time in Syracuse, where he wrote the greatest part of the present book, *The Last Things*. He called Syracuse (a city facing the east) 'The only place where one could stand sunset.' Then he visited Calabria, the island of Ischia, Rome, Florence, and returned in the latter days of September to Vienna. Here he was frequently visited by suicidal intentions. He worked two nights on his 'Last Aphorisms,' and found suddenly the solution of the problem which had formerly tortured him, 'Not the souls, not the individuals are ultimate realities, even they are an expression of vanity, in that they attach importance to personality. The highest reality is alone the Good which includes all single contents.'

"Weininger proposed to leave Vienna and to travel again, but his condition grew worse and the catastrophe approached. A dismal pessimism, which was also conceived as guilt, came over him. Thus he said: 'All that I have written is doomed because it has been written with bad intention . . . perhaps everything is cursed with which I have ever come in contact.' Next day he rented a room in which Beethoven had died. There he stayed one night and early in the morning, October 4, 1903, he ended his life abruptly by a shot into his breast."

The fate of this man is perhaps more interesting than his books, and among his books his last and posthumous deserves most of all our attention. His thoughts are instructive mainly as documents of a pathological life, a life with which we feel sympathy because it was fated to end tragically, yet it contains much that is great and noble.

The contents of the book are as follows: (1) Peer Gynt and Ibsen, containing some comments on erotics, on hatred and love, on crime, etc.; (2) Aphorisms, containing comments on the psychology of Sadism and Masochism (pp. 65 ff.), the psychology of murder, ethics, original sin, etc.; (3) Notes on Characterology, the neophytes and the priest, on Friedrich Schiller, fragments on Wagner and his "Parsifal"; (4) The One-Dimensionality of Time

and Its Ethical Significance, together with speculations on time, space, and will, and the problem of time; (5) Metaphysics, containing the suggestions of a universal symbolism, psychology of animal types, the psychology of criminals, the animal psychology of the dog, the horse, and other general comments; (6) Culture and Its Relation to Faith; Fear and Knowledge. The last chapter concludes with Aphorisms.

PANIDEAL. Psychologie der sozialen Gefühle, von *Rudolf Holsappel*, mit einem Vorwort von *E. Mach*. Leipzig: Johann Ambrosius Barth. 1901.

A special interest attaches to this book on account of the preface, written by Prof. Ernst Mach, who has considerably influenced the author in the formation of his world-conception, which is practically a reconstruction of man's religious aspirations, with new aims and a new authority in the domain of conduct, the latter, which is called "*Panideal*," furnishes an appropriate title to the book.

In the preface, dated at Vienna, July, 1901, Professor Mach says:

"During the last winter the author of the present books, who introduced himself as a former student of R. Avenarius, visited me and handed me the ms. for perusal. I had never busied myself with an analysis of sentiments, this part of psychology lying without my sphere of interest, and the abstract mode of presenting the subject was at the start to me very little sympathetic. Thus I began my reading, to say the least, without any preconceived favorable opinion, as a kind of duty, but my interest rose with the progress of my study and I became highly interested in many of its parts. It threw certain light upon certain phases of my inner life, to which I, being a naturalist devoted to the investigation of objective phenomena, had so far paid little attention. Indeed, one may gain here a deeper insight into the psychology of the inquirer, the inventor, the artist, the founder of a religion and to the builder of civilization. One learns to understand how even our own ego in its evolution may become alienated to himself, to the very same ego in another phase of its development.

"One can very well see in this book that the author has lived much; but, of course, the individual psychical experiences upon which his abstract exposition is built and which give to his ideas their concrete contents, appeal to him more in their full reality than they would to the reader who may perhaps never have had analogous experiences of the same intensity and who can only fall back upon shadowy notions of his own experience. Further elucidations of his exposition, through concrete instances, by relating typical events, if not his own personal recollections, would be highly desirable. The efficacy of his labors I confidently believe could thereby only gain. However, even in its present shape, the book will be helpful and may prove that, in spite

of all the valuable methods of modern psychology, with its experiments and measurements, the possibilities of simple introspective self-observation are by no means as yet exhausted."

The book itself consists of aphorisms which are arranged in nine chapters under the titles "Solitude," "Longing," "Hope," "Prayer," "Struggle," "Conscience," "Art," "Worlds" and "Ideal." The aphoristic utterances of the author are consecutively numbered and amount to 1,075, with an epilogue which reads as follows:

"No ideal for which I could live,  
Even with the highest no [helpful] hint.  
Myself I must seek, perhaps find."

The thousand and odd sentences are, as may be expected, of very unequal value. Some of them express fine sentiments, others seem trivial, and a few are obscure. Unquestionably they are all full of significance to the author, being expressions of his inmost convictions. They are of a man who has no faith in the established religions, yet feels an impulse stirring in himself that would be able to reconstruct a new religion, which would be better adapted to his particular needs. There is scarcely a mention of God in the book, yet the chapter containing his thoughts on prayer prove him a man of deep insight and religious feeling. He says:

"Prayer is mostly addressed to mere concepts or fictions, because our conversation with concepts is easier than a communication with realities."<sup>1</sup> (336.)

"Therefore prayer mostly assumes the soul and character of a monologic dialogue in which the praying person either speaks himself, while the person prayed to is conceived as listening, viz., assumed to be tacitly present, or the praying person and the adored one are thought to intercommunicate, while both remain to all appearances silent." (337.)

"Each prayer involves more or less a great hope of being answered, a help, or an edification." (344.)

"Prayers can be made, not only in words and music, but also in color, sculpture and architecture; nay! these arts are indispensable for the intensification of the disposition, as well as the effect of prayer." (352.)

Prayer according to Holzapfel depends very much upon the idea of the power or the person prayed to, but even if an individual be deprived of the illusion of its or his God's existence, he may continue to love anthropomorphism, and to address prayers to his ideals, but they will lose much of their former power and significance. A disappearance of illusion may finally lead to an atrophy of the need of prayer, yet prayer is a power in mankind. Holzapfel says:

"Almost all modern empiricists and atheists look upon prayer and the

<sup>1</sup>The text reads, "Wahrnehmungs verkehr," meaning "the actual objects of sense perception," i. e., "realities." A literal translation is here, as in many other passages, impossible.

need of prayer as slavish, barbaric and useless. But the builders of our civilization knew better." (388.)

"Sufficiently oriented poets may be induced to create new prayer poems." (386.)

"Among the most potent means of promoting human and humane developments are prayers addressed to the evolution-ideal and especially the prayer to the Panideal. The Panideal is defined (in 1052) as the pure ideal of a hygio-psychical, maximal, positive, valuation, which in its fullness (as explained in 1056) is unattainable and can only be longed for and aspired for." (381.)

The reviewer believes to know German, but he can only guess at the exact meaning of some new expressions and word combinations, such as "*ethikalische Kopierungen*," "*menschheitsentwicklungsrevolutionaere Moralbilligung*" and "*unterschiedsgraduell hygiopsychisches Panideal*."

The Panideal is a kind of new religion which will prove interesting to men of science such as Mach, but it is very doubtful whether this special instance will appeal to large masses, and it is, as Professor Mach hinted at in the preface, too abstract to exercise any effect upon others; and so it may be regarded as a symptom, not merely of the present state of unrest, but also of the tendency toward the formation of a new faith that is budding in the heart of modern man.

STUDIES IN PSYCHOLOGY. Edited by *George T. W. Patrick*, Professor of Philosophy. Volume III. University of Iowa. Iowa City, Ia. 1902. Price, \$1.00.

The third volume of these studies contains two essays by C. E. Seashore, entitled "A Method of Measuring Mental Work: the Psychergograph" and "A Voice Tonoscope;" one article by the same, assisted by Miss Mabel Clare Williams, on "An Illusion of Length." A fourth article is devoted to "Normal Illusions in Representative Geometrical Forms," by Miss Williams, and the concluding essay by George T. W. Patrick describes "The New Psychological Laboratory of the University of Iowa."

STUDIES IN THE PSYCHOLOGY OF SEX. Analysis of the Sexual Impulse. Love and Pain. The Sexual Impulse in Women. By *Havelock Ellis*. Philadelphia: F. A. Davis Company. 1903.

Mr. Havelock Ellis, one of the best authorities in the studies of sex and its various problems, here publishes the first section of a volume which is to treat on the psychology of sex. It analyzes and tries to explain the sexual impulse, and the entire volume will be completed with two other monographs on subjects in the same line to be published by the same publishers.

A French edition of Prof. Mach's *History of Mechanics* has been published.